

NORTHEAST WATER PURIFICATION PLANT EXPANSION PROJECT

FOR THE CITY OF HOUSTON

SUBCONTRACT NO.: 697592-4010

SUBCONTRACT TITLE: EWP4 - 108-INCH TRANSMISSION MAINS



EXHIBIT A

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1.0 SUBCONTRACT AGREEMENT

In consideration of their mutual promises, the parties agree that this Subcontract Agreement for construction and related services (the "Subcontract" or "Agreement") is effective this 6th day of March, 2018 by and between HOUSTON WATERWORKS TEAM-(HWT), with a place of business at 12630 Water Works Blvd, Humble, Texas 77396 and Barnard Construction Company hereinafter "Subcontractor", with a place of business at 701 Gold Avenue, Bozeman, MT 59715

1. City of Houston hereinafter referred to as "Owner" has awarded a contract (Prime Contract) to HOUSTON WATERWORKS TEAM for the Northeast Water Purification Plant Expansion Project, and
2. HOUSTON WATERWORKS TEAM wishes to employ Subcontractor to perform construction and related services for the Northeast Water Purification Plant Expansion Project as more fully described in Exhibit A: Scope of Work, attached hereto, and
- 3.0 Subcontractor is willing to perform the Work required by the Project, in accordance with the terms and provisions of this Agreement, in return receiving compensation for the Subcontract Price detailed below and in the amounts and manner detailed in Exhibit C: Pricing, Payment, and Change Management, attached hereto.

Owner, HOUSTON WATERWORKS TEAM and Subcontractor agree to work together to provide a safe Project. Subcontractor is expected to adopt a standard of performance that demands safety and conformance to the Subcontract requirements and shall act in a manner that facilitates communication, proactively identifies issues, provides for the exchange of ideas and information and promotes cooperation in the solution of problems.

TIME FOR PERFORMANCE: Subcontractor shall commence Work on or about March 7, 2018; actual date will be the date HWT receives Notice To Proceed (NTP) from the City of Houston and shall complete the Work no later than thirteen months following the date of NTP.

SUBCONTRACT PRICE: As full and complete compensation for satisfactory performance of the Work in accordance with the Subcontract Documents, Subcontractor shall be paid the firm, fixed, lump sum amount of \$31,297,110.68 USD, as more fully described in Exhibit C: Pricing, Payment, and Change Management.

RETENTION: All payments are subject to retention in the amount of five percent (5%) of the invoice value. Retention shall be released as a Final Payment upon completion of the Work including all deliverable documentation and receipt by HOUSTON WATERWORKS TEAM of the Final Acknowledgement and Lien Release as more fully described in Exhibit C: Pricing, Payment, and Change Management.

INSURANCE: Prior to commencing Work Subcontractor shall furnish Certificates of Insurance to HOUSTON WATERWORKS TEAM evidencing compliance with the requirements of the Subcontract Documents.

SUBCONTRACT DOCUMENTS: The following documents (as may be amended in writing) form the Subcontract Agreement.

Subcontract No.: 697582-4010
Subcontract Title: EWP4 – 108in Transmission Mains



Subcontract Agreement	Exhibit D: Schedule
General Terms and Conditions	Exhibit E: Project Controls
Special Conditions	Exhibit F: Quality Assurance / Quality Control
Exhibit A: Scope of Work	Exhibit G: Health, Safety, and Environmental
Exhibit B: Technical Documents	Exhibit H: Site Material Control
Exhibit C: Pricing, Payment and Change Management	Exhibit I: Project Work Rules and Site Conditions
Exhibit D: Schedule	

Order of precedence shall be as listed herein with the exception of the “Special Conditions” which shall take precedence over the General Terms and Conditions and the documents that follow in the list.

NOTICES: Any written notice required by the terms of this Subcontract, except as otherwise specifically set forth herein, shall be delivered to the following representatives at the addresses of the designated representatives.

Subcontractor Representative:

Aaron Rietveld
701 Gold Avenue
Bozeman, MT 59715
Phone: 406-586-1995

Email: aaron.rietveld@barnard-inc.com

HOUSTON WATERWORKS TEAM Representative:


Steve Dicks / Toby Frend
12630 Water Works Blvd.
Humble, Texas 77396
Phone: 281-806-004 -S. Dicks (Cell)
702-581-2286 -T Frend (Cell)

Email: Steve.Dicks@newppexpansion.com
Toby.Frend@newppexpansion.com


This Agreement constitutes the entire agreement between the parties and supersedes all prior negotiations, representations or agreements related to the compilation of this Agreement, either written or oral.

EXECUTED in duplicate originals this day March 9, 2018 (Effective Date)

For SUBCONTRACTOR:

By 
Print Name Aaron Rietveld
Print Title Vice President

For HOUSTON WATERWORKS TEAM:

By 
Print Name Matthew P. Tuller
Print Title Vice President

END OF SUBCONTRACT AGREEMENT

2.0 LUMP SUM SUBCONTRACT GENERAL TERMS AND CONDITIONS

HWT-P05NF-0504-LF1-2
FORM REV 0 JUN-17

1.0 Article 1 - Definitions

For the purposes of the Subcontract Documents, the following words and terms shall have the meanings specified below. Other words and abbreviations that have well-known technical or trade meanings are used in the Subcontract Documents in accordance with such recognized meanings.

1.1 Applicable Law

Applicable Law means any law, statute, order, decree, injunction, license, permit, consent, approval, agreement or regulation of any Governmental Authority having jurisdiction over the matter in question, or other legislative or administrative action of a Governmental Authority, or a final decree, judgment or order of a court which relates to the performance of Work hereunder or the interpretation or application of this Subcontract.

1.2 Change Order

Change Order means a document signed by HOUSTON WATERWORKS TEAM after the execution of this Subcontract directing a change in the Work and/or an adjustment in the Subcontract Price and/or the times for completion of the Work.

1.3 Completion

Completion means the Work has been completed as specified in this Subcontract. Until the time Completion is achieved or the Work is terminated the provisions of the Subcontract remain in full force and effect

1.4 Day

Day means a calendar day unless otherwise specifically designated.

1.5 Final Completion

Final Completion means the point in time when all Work, including Punch list Work, has been completed in accordance with this Subcontract and HOUSTON WATERWORKS TEAM has accepted such Work as complete.

1.6 Good Practices

Good Practices means those standards, practices, methods, level of skill and equipment, generally prevailing on the Effective Date, that are commonly and ordinarily used by firms that perform similar work as Subcontractor has agreed to perform pursuant to this Subcontract.

1.7 Governmental Authority

Governmental Authority means any national, state, or local government, any political subdivision thereof, or any governmental, quasi-governmental, judicial, public or statutory instrumentality, administrative agency, authority, body, or other entity having jurisdiction over the performance of the Work, the Project or its operations, or the health, safety or environmental conditions of the Project or the Site or otherwise over the parties hereto.

1.8 Hazardous Materials

Hazardous Materials means any hazardous or toxic substance or hazardous or toxic waste, contaminant, or pollutant as defined by or regulated by any applicable Governmental Authority.

1.9 Milestone

Milestone means a principal event specified in this Subcontract relating to an intermediate completion date or time up to and including Substantial Completion of all the Work

1.10 Parties

Parties means HOUSTON WATERWORKS TEAM and Subcontractor identified in the Subcontract Agreement

1.11 Prime Contract

Prime Contract means the contract executed by Owner and HOUSTON WATERWORKS TEAM relating to the Project.

1.12 Project

Project means the facility or improvement identified in the Subcontract which Subcontractor's Work may be a whole, or, a part.

1.13 Project Schedule

Project Schedule means the schedule and any updates thereto, prepared by HOUSTON WATERWORKS TEAM for the Project, including Work to be performed by Subcontractor.

1.14 Punch List

Punch List means the list prepared by HOUSTON WATERWORKS TEAM prior to Substantial Completion, with the full assistance and cooperation of Subcontractor, that sets forth those items of Work that remain to be performed to ensure that the Work is complete and fully complies with all of the standards and requirements set forth in this Subcontract. The Punch List shall not include any items of Work which (i) prevents the Work from being used and operated for its intended purposes in accordance with Applicable Law; or (ii) could have an adverse effect on the operation, efficiency, or reliability of the Project.

1.15 Site

Site means the land, or other areas designated in this Subcontract, as being furnished by Owner for the performance of Work, including storage, lay down, or access.

1.16 Subcontract

Subcontract means the Contract formed by the documents listed in the Subcontract Agreement, as amended.

1.17 Substantial Completion

Substantial Completion means the time at which (i) the Work (or a specified part) has progressed to the point where it is sufficiently complete in accord with this Subcontract so that the Work (or a specified part) can be used for the purposes for which it is intended; and (ii) the only remaining Work to be completed is Punch List Work.

1.18 Lower Tier Subcontractor

Lower Tier Subcontractor means a person, or entity, of any tier, who has a contract either directly, or, indirectly with Subcontractor, to perform any portion of the Work at the Site, or to provide services, equipment or materials to Subcontractor for use in performance of the Work.

1.19 Work

Work means all services, labor, materials, equipment, testing, management and administration require of the Subcontractor and its Lower Tier Subcontractor(s) to fulfill Subcontractor's obligations under this Subcontract.

2.0 Article 2 – Subcontractor’s Responsibilities

2.1 Subcontract Documents

The Subcontract Documents are intended to be correlative and complementary, and any Work required by one part and not mentioned in another shall be executed to the same extent and purpose as though required by all. The misplacement, addition or omission of a word or character shall not change the intent of any part from that set forth by the Subcontract Documents as a whole. Should a question or doubt arise as to the intent and meaning of any part of the Subcontract Documents, Subcontractor shall immediately notify HOUSTON WATERWORKS TEAM in writing before the part of the Work affected is performed. Any additional cost incurred by Subcontractor because of Subcontractor's failure to timely notify HOUSTON WATERWORKS TEAM or have such conflicts resolved before continuing with the work shall be for Subcontractor's account. HOUSTON WATERWORKS TEAM's determination of intent and meaning of such part shall be final and binding upon Subcontractor.

Where reference is made in the Subcontract to applicable codes and standards, the Work shall, except as otherwise specified, conform to the latest issue of the referenced code or standard. Where specific governing standards are not specified for the Work of this Subcontract, or, accepted Industry and Governmental codes and standards applicable to the materials, equipment, or work shall govern.

Should a conflict between applicable drawings and specifications, codes and standards, or, between similar requirements of differing degree, arise, HOUSTON WATERWORKS TEAM shall be notified, but the drawing, specification, code or standard having the more stringent requirements shall govern, unless otherwise stipulated by HOUSTON WATERWORKS TEAM.

2.2 Performance of the Work

Subcontractor shall perform all the services required to execute the Work described in these Subcontract Documents, including Exhibit A: Scope of Work using the latest revision of “Approved for Construction Drawings and Specifications.” Subcontractor shall furnish all labor, materials, tools, equipment, supervision, and services necessary to prosecute and complete the Work in strict accordance with and reasonably inferable from the Subcontract Documents. The Work shall include any work, services, materials, or equipment that may reasonably be inferred from prevailing custom or trade practices as being required to satisfy the requirements of this Subcontract. Progress and reporting requirements are specified in Exhibit E: Project Controls.

2.3 Qualifications of Subcontractor

Subcontractor represents and warrants that it understands the requirements of this Subcontract and that it is experienced and qualified to perform the Work described herein, and is properly staffed, organized, and financed to perform such Work within the time specified.

2.4 Independent Contractor

In the performance of Work, Subcontractor shall operate as an independent contractor and not as an agent or employee of HOUSTON WATERWORKS TEAM or Owner. Nothing in this Subcontract shall be construed to create a contractual relationship between persons or entities other than HOUSTON WATERWORKS TEAM and Subcontractor. There are no third-party beneficiaries to the Subcontract.

2.5 Review of Information

Subcontractor agrees to be bound by all the conditions, terms and requirements of this Subcontract. Subcontractor hereby affirms that it has thoroughly examined all Subcontract Documents.

2.6 Drawings and Specifications

Subcontractor shall not commence any part of the Work without the current approved for construction documents listed in Exhibit B: Technical Documents. Unless otherwise specified, HOUSTON WATERWORKS TEAM shall furnish to Subcontractor all copies of Drawings and Specifications necessary for performance of the Work. HOUSTON WATERWORKS TEAM shall provide additional copies at the actual cost of reproduction.

Omissions from the Drawings or Specifications or the miss-description of details of Work which are clearly necessary to carry out the intent of the Drawings and Specifications, or which are customarily performed, shall not relieve Subcontractor from performing such omitted or miss-described details of the Work. They shall be performed as if fully and correctly set forth and described in the Drawings and Specifications.

Subcontractor shall check all Drawings and Specifications furnished to it immediately upon receipt and shall promptly notify HOUSTON WATERWORKS TEAM of any omissions or discrepancies. Figures marked on Drawings shall, in general, be followed in preference to scale measurements. Large scale Drawings shall, in general, govern small scale Drawings. Subcontractor shall compare all Drawings and verify the figures before laying out the Work and shall be responsible for any errors which might have been avoided thereby.

2.7 Discrepancy in Subcontract Documents

Subcontractor shall give HOUSTON WATERWORKS TEAM prompt written notice if Subcontractor observes any discrepancy in or between any of the Subcontract Documents. In case of any inconsistency, conflict or ambiguity among the Subcontract Documents, the order of precedence specified in the Subcontract Agreement shall govern. Within a reasonable time after Subcontractor's notice of any such discrepancy, HOUSTON WATERWORKS TEAM shall instruct Subcontractor as to the measures to be taken, and Subcontractor shall comply with HOUSTON WATERWORKS TEAM's instructions.

2.8 Inspection of Site

Prior to commencing the Work Subcontractor acknowledges that it has ascertained the nature and location of the Work, the character and accessibility of the Site, the existence of obstacles to construction, the availability of facilities and utilities, the location and character of existing or adjacent work or structures, the surface and subsurface ground and soil conditions, and other local conditions that might affect its performance of the Work or the cost thereof, **to the extent this could be ascertained during the pre-bid Site Visit or from a review of the Geotechnical documents provided by HWT.**

Subcontractor represents and warrants that it has inspected the Site and has satisfied itself fully as to all existing conditions at the Site and all other matters and conditions that may affect the operation and completion of the Work. Any failure by Subcontractor to acquaint itself with the available information shall not relieve it from responsibility for successfully performing the Work. HOUSTON WATERWORKS TEAM assumes no responsibility for any conclusions or interpretations made by Subcontractor on the basis of information made available by HOUSTON WATERWORKS TEAM.

Subcontractor agrees it shall make no claim for an increase in the Subcontract Price or for an extension in the time for performance based on a plea of ignorance of conditions at the Site whether such conditions existed at the time of commencement of the Work, or thereafter, if said ignorance results from Subcontractor's failure to make all necessary examinations and investigations of the Site, and/or if said conditions reasonably should have been anticipated or could have been discovered. HOUSTON WATERWORKS TEAM assumes no responsibility for any understanding or representations concerning Site conditions made by any of its representatives prior to the execution of this Subcontract unless such understandings or representations by HOUSTON WATERWORKS TEAM are expressly stated in this Subcontract.

2.9 Layout and Verification

Subcontractor shall verify all control lines and benchmarks and notify HOUSTON WATERWORKS TEAM of any discrepancy before proceeding with the Work; be responsible for all required layout, positioning and placement of all elements of the Work, familiarize itself with all Subcontract Documents and shop, fabrication and installation details of other trades and divisions of work, particularly those affecting or affected by the Work under this Subcontract; and verify all dimensions and take all measurements for any portion of the Work that is dependent for proper size or installation upon coordination or fit with other work or conditions without reliance on representations or indications of HOUSTON WATERWORKS TEAM, this Subcontract or other subcontractors.

Subcontractor shall protect and preserve the established reference points and shall make no changes or relocations without the prior written approval of HOUSTON WATERWORKS TEAM. lost or destroyed or requires relocation because of necessary changes in grades or locations, and shall be responsible for the accurate replacement or relocation of such reference points.

Subcontractor's Work shall be executed in accordance with the locations, lines and grades specified or shown on the Subcontract Documents, subject to such modifications as HOUSTON WATERWORKS TEAM may require.

2.10 Construction Means and Methods

Subcontractor is solely responsible for all construction means, methods, techniques, sequences, procedures, and safety and security programs in connection with the performance of the Work, irrespective of approval by or consent of HOUSTON WATERWORKS TEAM.

2.11 Subcontractors Equipment

Subcontractor's equipment shall be in good operating condition, shall comply with all applicable codes, rules, and regulations, and shall be suitable for safe and efficient prosecution of the Work. It shall be subject to inspection and acceptance by HOUSTON WATERWORKS TEAM at all times. Any equipment that does not meet the foregoing standard shall be removed and replaced with acceptable equipment without cost to HOUSTON WATERWORKS TEAM or delays to the Project Schedule.

Subcontractor shall provide insurance for the benefit of HOUSTON WATERWORKS TEAM covering all risk of loss, including loss of use, or damage to Subcontractor's construction equipment, tools, facilities and structures, and all vessels or barges, if any, used by Subcontractor in executing the Work, with limits equal to or greater than the fair market value of such equipment, tools, facilities, structures, vessels and barges, if any. Any deductible amounts shall be paid by Subcontractor. Such insurance shall be endorsed to waive all rights of subrogation against HOUSTON WATERWORKS TEAM and Owner, and their respective affiliates and subsidiaries.

Prior to commencement of the Work, Subcontractor shall provide HOUSTON WATERWORKS TEAM with an insurance certificate evidencing the insurance coverage maintained or obtained on such equipment, tools, facilities, structures, vessels and barges, if any, and that the policy or policies of applicable insurance have been endorsed to contain the aforementioned waiver of subrogation. With HOUSTON WATERWORKS TEAM's approval, Subcontractor may self-insure the foregoing risks. Whether such equipment, tools, facilities, structures, vessels and barges are insured or self-insured, Subcontractor assumes all risk of loss, including loss of use, or damage to such equipment, tools, scaffolding, facilities, structures, vessels and barges, if any, including but not limited to loss or damage arising as a result of the fault or negligence (whether active, passive, sole or concurrent) or strict liability of HOUSTON WATERWORKS TEAM or Owner or their respective affiliates, and subsidiaries to the fullest extent allowed by Applicable Law

2.12 Use of Owner's or HOUSTON WATERWORKS TEAM's Equipment

Subcontractor, its agents, employees, and Lower Tier Subcontractors shall not use Owner's or HOUSTON WATERWORKS TEAM's equipment (including without limitation vehicles, machinery, tools, scaffolding, hoists or similar items owned, leased or under the control of HOUSTON WATERWORKS TEAM or Owner) without the express written permission of HOUSTON WATERWORKS TEAM's designated representative. If such equipment is used, with or without the required permission, Subcontractor shall defend, indemnify and be liable to HOUSTON WATERWORKS TEAM and Owner for any loss or damage (including personal injury or death) that may arise from such use.

2.13 Temporary Facilities, Utilities and Services

Subcontractor is responsible for all temporary facilities, utilities, and services it requires for the performance of Work at the Site, except as otherwise specified in the Subcontract Documents.

If HOUSTON WATERWORKS TEAM and/or Owner furnishes electric current, water, gas, or other utilities or services, HOUSTON WATERWORKS TEAM and/or Owner assumes no responsibility or liability for loss of or damage to the equipment or materials of Subcontractor or its Lower Tier Subcontractors, if any, resulting directly or indirectly from the presence or absence of the same or Subcontractor's use thereof.

2.14 Subcontractor's Representative

Subcontractor shall designate, in writing to HOUSTON WATERWORKS TEAM, Subcontractor's Representative who shall be authorized to act on behalf of Subcontractor and who shall have full authority to bind Subcontractor. Subcontractor shall notify HOUSTON WATERWORKS TEAM in writing if it intends to change its representative, which shall be subject to HOUSTON WATERWORKS TEAM approval. HOUSTON WATERWORKS TEAM may require Subcontractor to replace its representative at any time at no additional cost or liability.

The Subcontractor Representative, or HOUSTON WATERWORKS TEAM approved alternate, shall be on the Site at all times Work is being performed

2.15 Subcontractors Workforce

Subcontractor shall supply a sufficient number of skilled workers to perform the Work promptly and diligently. Prior to commencement of the work, Subcontractor shall provide HOUSTON WATERWORKS TEAM with copies of its policies regarding the furnishing of labor including copies of all wage agreements, working rules, and regulations, applicable to the execution of the Work.

Subcontractor shall abide by all wage agreements, working rules and regulations, or its labor policies, applicable to the Work, and shall not become a party to, or otherwise make any change thereto without the prior written consent of HOUSTON WATERWORKS TEAM.

Subcontractor shall confine the employees, agents and invitees of Subcontractor and its Lower Tier Subcontractors to those portions of the Site necessary for the performance of the Work and prohibit such personnel from entering upon any other portions of the Project Site or properties or facilities of Owner except as specifically authorized by HOUSTON WATERWORKS TEAM and the Owner.

Subcontractor shall provide competent and adequately trained and skilled personnel. Subcontractor shall, upon request, remove from the Project any person found by HOUSTON WATERWORKS TEAM to be incompetent, unsafe, disorderly, unreliable, or unwilling to comply with Subcontract requirements. Subcontractor shall provide badges, color codes, or other symbols or identification for its employees, tools and equipment, in accordance with the system specified by HOUSTON WATERWORKS TEAM. Subcontractor shall cooperate in security measures for the prevention of theft, pilferage, and waste.

Subcontractor accepts exclusive liability for the payment of, all wages, benefit contributions and payroll taxes for all employees of Subcontractor engaged in the performance of Work.

Subcontractor and its employees, and the employees and agents of its Lower-Tier Subcontractors, shall not perform Work while under the influence of alcohol or any controlled substance, or while a measurable presence of alcohol or such substances has or can be shown by a urine or blood test. Controlled substances including but not limited to; marijuana, hashish, cocaine, hallucinogens, depressants and stimulants unless prescribed for current personal treatment by a licensed physician.

The Subcontract Price includes the cost of drug testing of its employees and of the employees of its Lower-Tier Subcontractors before assignment to the Work and the cost of periodic random drug testing of same after assignment to the Work, if such testing(s) is directed by HOUSTON WATERWORKS TEAM. Refer to Exhibit G: Health, Safety, and Environmental of this Subcontract for any further drug testing requirements.

Subcontractor's employees and the employees of its Lower-Tier Subcontractors shall be drug free on their first assignment to the Work. Failure of Subcontractor to comply with any provision of this section shall constitute material breach.

2.16 Labor Harmony

Subcontractor shall not interfere with the work of HOUSTON WATERWORKS TEAM or others on the Site, unless Subcontractor first obtains written authorization from HOUSTON WATERWORKS TEAM to do so. The Subcontractor shall not have free access to the entire Site. The priority of the work and use of appropriate access gate shall be assigned by HOUSTON WATERWORKS TEAM.

During the performance of this Subcontract, Subcontractor agrees as follows:

- 2.16.1 If any strike, picket, walkout, or other work stoppage or slowdown is caused by any labor dispute, Subcontractor shall continue to perform the Work without interruption or delay.
- 2.16.2 Subcontractor shall notify HOUSTON WATERWORKS TEAM immediately of any labor dispute. HOUSTON WATERWORKS TEAM may require such assurance from Subcontractor as HOUSTON WATERWORKS TEAM deems necessary that Subcontractor will be able to complete the Work.
- 2.16.3 Subcontractor understands and agrees that a strike, picket, walkout, or other work stoppage or slowdown resulting from any labor dispute shall not constitute a delay directly caused by an act of HOUSTON WATERWORKS TEAM or Owner.

2.16.4 All labor employed by Subcontractor for the Work shall be in harmony with and be compatible with all other labor being used by HOUSTON WATERWORKS TEAM or others on the Project.

If Subcontractor fails to comply strictly with the terms of this labor harmony clause, HOUSTON WATERWORKS TEAM may, in addition to all other rights it has under this Subcontract and at law, terminate or suspend this Subcontract in accordance with Article 11.4, Termination of Subcontractor for Cause.

2.17 Lower Tier Subcontracts

Subcontractor shall assure that all Lower Tier Subcontractors who perform Work on the Project do so under the terms of an agreement that complies with the applicable provisions of this Subcontract and that binds the Lower Tier Subcontractor to all terms and conditions of this Subcontract. All Lower Tier Subcontractors must be approved by HOUSTON WATERWORKS TEAM in writing before such person or entity may enter the Site or perform any portion of the Work on behalf of Subcontractor.

2.18 Quality of the Work

HOUSTON WATERWORKS TEAM shall have the right to inspect the Work and Subcontractor's equipment, tools, records and facilities at all times. No Work shall be covered until inspected and released in accordance with inspection procedures approved by HOUSTON WATERWORKS TEAM. Any Work improperly covered shall be uncovered and exposed by Subcontractor at its expense for inspection on request. Any defective Work shall be discontinued, removed and replaced or corrected at Subcontractors expense and HOUSTON WATERWORKS TEAM direction. Any HOUSTON WATERWORKS TEAM or Owner review, inspection, or approval of the Work shall not relieve Subcontractor of its obligation to comply with all requirements of the Subcontract. Subcontractor shall furnish all Quality Assurance and Quality Control documentation required by HOUSTON WATERWORKS TEAM for the Work.

2.19 Equipment and Materials

Unless otherwise provided in the Subcontract Documents, all services, equipment and materials necessary to complete the Work shall be provided by Subcontractor. All materials and equipment incorporated into the Work are to be new and of the most suitable grade for the purpose intended. Subcontractor shall furnish HOUSTON WATERWORKS TEAM for its review and comment, complete information concerning the material or equipment, the name of the manufacturer, the model number, and other identifying data and information with respect to the performance, capacity, nature, and rating of the materials that Subcontractor intends to incorporate in the Work. Management of materials and equipment shall be in accordance with Exhibit H: Site Material Control.

When directed by HOUSTON WATERWORKS TEAM, Subcontractor shall submit Samples for review and comment at the Subcontractor's expense, with all shipping charges prepaid. Materials installed or used without required review and comment shall be at the risk of subsequent rejection by HOUSTON WATERWORKS TEAM and/or the Owner. Review and comment by HOUSTON WATERWORKS TEAM is not an authorization to Subcontractor to perform changes in the Work. Subcontractor must follow the provisions of Article 7, Changes.

If material or equipment furnished by Subcontractor are not delivered promptly to the Site and delay or threaten to delay the general progress of the Work or the Project Schedule, HOUSTON WATERWORKS TEAM may investigate said delay and to expedite all said deliveries pursuant to Article 3.4, Progress of the Work.

Unless otherwise specified, when making or ordering shipment, Subcontractor shall not consign or have consigned in the name of HOUSTON WATERWORKS TEAM or Owner any material or equipment. HOUSTON WATERWORKS TEAM or Owner shall accept no deliveries of material or equipment purchased by the Subcontractor and consigned to either of them. It shall be Subcontractor's full responsibility to pack, ship, receive, unload, and store material or equipment to ensure against damage in shipment and at the Site. Subcontractor's storage of materials at the Site shall be confined to areas authorized or approved by HOUSTON WATERWORKS TEAM. If temporary placement or storage of material or equipment at the Site makes the partial or complete occupancy of HOUSTON WATERWORKS TEAM or Owner difficult, or makes difficult the work of others, HOUSTON WATERWORKS TEAM may require Subcontractor to move at Subcontractor's sole expense, all said material or equipment promptly and to designate the areas in which said material or equipment shall be placed. If Work includes installation of material or equipment furnished by HOUSTON WATERWORKS TEAM, Owner, or others, the responsibility for care, custody, and control of such items shall transfer to Subcontractor upon receipt of such items. Title to such material or equipment shall remain at all times with the Owner. It shall be the responsibility of Subcontractor to exercise proper care in receiving, handling, storing, applying preventative maintenance as directed by the manufacturer and installing such items and to maintain adequate control records in accordance with good industry recognized material management practices. Unless otherwise set forth in the Subcontract Documents, Subcontractor shall prepare receiving reports for all such items that are received after Subcontractor mobilizes at the Site, and shall provide such receiving reports, together with all shipping papers, receiving documents and inspection reports to HOUSTON WATERWORKS TEAM within forty-eight (48) hours after receipt. Subcontractor shall inspect material or equipment received and report to HOUSTON WATERWORKS TEAM in writing anything that does not conform to requirements of the Subcontract Documents. Subcontractor shall not proceed to install nonconforming material or equipment without further instructions from HOUSTON WATERWORKS TEAM. Loss or damage to material or equipment due to acts or omissions of Subcontractor shall be the responsibility of Subcontractor.

It shall be the responsibility of Subcontractor to plan its Work sufficiently so as to enable HOUSTON WATERWORKS TEAM and/or Owner to furnish materials and equipment to enable Subcontractor to work continuously and efficiently.

Subcontractor shall maintain written records for all material or equipment specified to be salvaged. Subcontractor shall be responsible for adequate storage and protection of all salvaged material or equipment and shall replace, at no cost to HOUSTON WATERWORKS TEAM or Owner, all salvaged material or equipment which are broken or damaged during salvage operations while in its care and custody.

Subcontractor shall upon completion of this Subcontract, prepare for shipment, deliver, or dispose of all HOUSTON WATERWORKS TEAM and/or Owner-furnished material or equipment not consumed in the performance of this Subcontract or not returned to Owner, as may be directed or authorized by HOUSTON WATERWORKS TEAM or Owner. The net proceeds of any such disposal shall be credited to the Subcontract Price or paid in such other manner as HOUSTON WATERWORKS TEAM or Owner may direct.

2.20 Marking

Subcontractor shall mark each package or shipment of materials or equipment being provided as part of the Work with this Subcontract number and in accordance with any additional requirements specified by HOUSTON WATERWORKS TEAM, and shall include an itemized packing slip affixed to the outside of each package with a copy inside each package.

2.21 Delivery of Warranties

Prior to Final Completion, Subcontractor shall collect all written warranties and equipment manuals and deliver them to HOUSTON WATERWORKS TEAM. Additional requirements for warranties and manuals are included in the Contract Documents.

2.22 Submittals

Subcontractor shall be responsible to HOUSTON WATERWORKS TEAM for the accuracy and conformity with the Subcontract Documents of shop drawings, samples, and other submittals that pertain to Subcontractor's Work. Subcontractor shall review, approve, and submit to HOUSTON WATERWORKS TEAM shop drawings, product data, samples, and other similar submittals required by this Subcontract. Subcontractor shall cooperate with HOUSTON WATERWORKS TEAM in coordination of the Subcontractor's shop drawings, product data, samples, and other similar materials with related documents submitted by other contractors. Submittals made by Subcontractor that are not required by this Subcontract may be returned without action. Subcontractor shall perform no portion of the Work requiring submittal and review of shop drawings, product data, samples, or similar submittal until the respective submittal has been approved. Such Work shall be in accordance with approved submittals. By approving and submitting shop drawings, product data, samples, and similar submittals, Subcontractor represents that Subcontractor has determined and verified materials, field measurements, specified performance and design criteria, and field construction criteria and has checked and coordinated the information contained within such submittals with the requirements of the Work and of this Subcontract.

2.23 Deviations

Subcontractor shall not be relieved of responsibility for deviations from requirements of this Subcontract by HOUSTON WATERWORKS TEAM's disposition of shop drawings, product data, samples, or similar submittals unless Subcontractor has specifically informed HOUSTON WATERWORKS TEAM, in writing, of such deviation at the time of submittal and HOUSTON WATERWORKS TEAM has given written approval of the specific deviation. Subcontractor shall not be relieved of responsibility for errors or omissions in shop drawings, product data, samples, or similar submittals by HOUSTON WATERWORKS TEAM's approval thereof.

2.24 Compliance with Applicable Laws

Subject to the terms and conditions of this Subcontract, Subcontractor shall comply and shall cause all Lower Tier Subcontractors, employees, agents and representatives to comply with all Applicable Laws in connection with the performance of Subcontractor's obligations under the Contract Documents. Subcontractor shall comply with all Applicable Laws including, but not limited to, those relating to equal employment opportunity and affirmative action for disabled veterans, veterans of the Vietnam Era, handicapped persons and all other legally protected classes, the Americans with Disabilities Act, the Fair Labor Standards Act as amended, Title VII of the Civil Rights Act of 1964, the Occupational Safety and Health Act, and the United States Foreign Corrupt Practices Act.

2.25 Assistance to HOUSTON WATERWORKS TEAM

Subcontractor shall provide HOUSTON WATERWORKS TEAM information reasonably requested by HOUSTON WATERWORKS TEAM to enable it to fulfill its obligations under this Subcontract. This obligation shall include, but not be limited to, providing such assistance as is reasonably requested by HOUSTON WATERWORKS TEAM in dealing with any Governmental Authority in matters relating to the Work or the Project.

2.26 Permits / Licenses

Subcontractor shall obtain all necessary permits and licenses necessary for Subcontractor to perform the Work or conduct business in the applicable jurisdiction in accordance with Applicable Law and shall be responsible for and correct any violations thereof.

2.27 Royalties and License Fees

Subcontractor shall pay all required royalties and license fees and shall procure, as required, the appropriate proprietary rights, licenses, agreements and permissions for materials, methods, processes and systems required for the performance of the Work. Included in rights, royalties and license fees are all costs associated with Owner training, and the editing, videotaping and reproduction of digital media associated with the Owner training program included in the Contract Documents.

2.28 Maintenance of Site

HOUSTON WATERWORKS TEAM shall designate for use by Subcontractor, entrances, parking areas, storage areas, office and work areas, and such temporary facilities and construction equipment as HOUSTON WATERWORKS TEAM is to provide. HOUSTON WATERWORKS TEAM shall allocate and schedule the use of, such common facilities and utilities as are provided for use by Subcontractor and other participants in the Project. Temporary interruption of services, utilities and use of facilities are anticipated and shall not justify a claim for an adjustment in compensation or time of performance.

Subcontractor shall at all times keep the Site in a neat, clean and safe condition, and shall conduct its operations in such a way as to minimize the impact upon the natural environment. Upon completion of any portion of the Work, Subcontractor shall promptly remove from the Site all its equipment, temporary structures and surplus materials not to be used at or near the same location during later stages of the Work. Upon completion of the Work and prior to final payment, Subcontractor shall, at its expense, satisfactorily dispose of all waste material and trash/rubbish, remove all plant, structures, equipment and materials belonging to Subcontractor and leave the Site in a neat, clean, and safe condition. If Subcontractor fails to commence compliance with cleanup duties within twenty-four (24) hours after written notification from HOUSTON WATERWORKS TEAM of non-compliance, HOUSTON WATERWORKS TEAM may undertake necessary cleanup measures without further notice and deduct the cost from any amounts due or to become due Subcontractor.

2.29 Health, Safety, Security and Environmental

Subcontractor shall perform its Work in accordance with Exhibit G: Health, Safety, and Environmental. Subcontractor is solely responsible for the safety and health of its employees, and all of its Lower Tier Subcontractor employees. Before commencing the Work, and as a condition of payment, Subcontractor shall provide evidence of compliance with the Exhibit G: Health, Safety, and Environmental, whether the performance of Work is by Subcontractor, or any of its Lower Tier Subcontractor(s) or anyone directly or indirectly employed by any of them and involved in performing Work at the Site. Full compliance with Applicable Laws and HOUSTON WATERWORKS TEAM and Owner safety and health and environmental requirements is mandatory. Failure to comply may result in disqualification and removal of the Subcontractor.

2.30 Emergencies

In any emergency endangering life or property, Subcontractor shall take such actions as may be reasonable and necessary to prevent, avoid, or mitigate injury, damage, or loss and shall, as soon as possible, report any incidents and the Subcontractor's response to HOUSTON WATERWORKS TEAM. HOUSTON WATERWORKS TEAM shall not be liable for any damages or injury resulting from any act or failure to act by HOUSTON WATERWORKS TEAM in rendering emergency care or as a result of any act or failure to act to provide or arranging for further medical treatment or care for the injured person.

2.31 Hazardous Materials

Subcontractor and Lower Tier Subcontractor(s) may, in accordance with Applicable Laws, bring onto the Site only such Hazardous Materials as are necessary to perform the Work and Subcontractor shall remain fully liable for all injury or damage arising out of or relating to any such Hazardous Materials.

2.32 Discovery of Hazardous Materials

If Subcontractor encounters any Hazardous Materials in or on the Site that create a safety or health hazard for Owner, HOUSTON WATERWORKS TEAM, Subcontractor, any Lower Tier Subcontractor(s) or their employees, agents or representatives, or the general public or the surrounding environment, Subcontractor shall notify HOUSTON WATERWORKS TEAM immediately and shall thereafter suspend all Work in the impacted area and follow the directions of HOUSTON WATERWORKS TEAM.

2.33 Protection of the Work

Subcontractor shall take necessary precautions to properly protect the Work, the work of others, and adjacent property from damage caused by Subcontractor's operations. Should Subcontractor cause damage to the Work or property of Owner, HOUSTON WATERWORKS TEAM, or others, Subcontractor shall promptly notify HOUSTON WATERWORKS TEAM and shall remedy such damage to the satisfaction of HOUSTON WATERWORKS TEAM, or HOUSTON WATERWORKS TEAM may remedy the damage and deduct the cost from any amounts due or to become due Subcontractor to the full extent that such costs are not recovered under applicable insurance.

3.0 Article 3 – Schedule and Completion of Work

3.1 Commencement of Work

Subcontractor shall commence the Work in accordance with the date specified in Page One (1) of the Subcontract Agreement, or, upon its receipt of a written notice from HOUSTON WATERWORKS TEAM ("Notice to Proceed") authorizing Subcontractor to commence the Work, and Subcontractor shall diligently pursue performance of the Work in accordance with this Subcontract.

3.2 Completion Dates

The Work shall be completed on or before the date specified in Page One (1) of the Subcontract Agreement.

3.3 Time is of the Essence

Subcontractor acknowledges that time is of the essence to achieve the dates set forth in Exhibit D: Schedule and achieving Completion on or before the Completion Date. Subcontractor shall perform the Work in an expeditious manner using adequate labor and equipment to complete the Work on or before the Completion Date. Subcontractor shall make necessary adjustments to accelerate the Work as necessary to maintain and meet the Project Schedule or as required by HOUSTON WATERWORKS TEAM for Subcontractor to comply with this Article.

3.4 Progress of the Work

Subcontractor agrees: (i) to provide at the Site the materials, equipment, labor and supervision necessary to commence Work on the date set forth in the title page of the Subcontract Agreement or Notice to Proceed; (ii) to perform the Work and all parts thereof promptly, diligently and in such order and sequence as agreed to assure the efficient, expeditious and timely prosecution of the entire Work under the Subcontract; and (iii) to furnish sufficient forces, supervision, equipment and materials, at such times and for such periods, as shall result in the required progress to achieve the dates specified in Exhibit D: Schedule and/or the agreed Completion Date. Subcontractor shall furnish in a timely manner any information requested by HOUSTON WATERWORKS TEAM reasonably required for scheduling, monitoring or expediting the Work. Subcontractor shall keep itself fully apprised of the status of other work occurring on the Project Site to the extent that the other work may influence the ability of Subcontractor to perform its Work. Failure of the Subcontractor to notify HOUSTON WATERWORKS TEAM of any such constraints shall not form the basis for a claim by Subcontractor against HOUSTON WATERWORKS TEAM or the Owner. Subcontractor shall promptly award and administer all lower tier subcontracts, contracts and purchase orders and shall immediately notify HOUSTON WATERWORKS TEAM of any inability of the Lower Tier Subcontractors to meet the requirements of the Project Schedule. Subcontractor shall furnish to HOUSTON WATERWORKS TEAM all necessary information reasonably required for expediting and monitoring such activity, and shall provide HOUSTON WATERWORKS TEAM access to its Lower Tier Subcontractors for the purpose of verifying and/or expediting their performance. If the Work is, or shall likely be, delayed due to the poor performance of Lower Tier Subcontractors HOUSTON WATERWORKS TEAM may cause improvement in that performance to meet the Project Schedule and Subcontractor shall reimburse HOUSTON WATERWORKS TEAM for any expenses required to secure or remedy their performance.

3.5 Right to Occupy

Owner or HOUSTON WATERWORKS TEAM shall have the right to occupy or use any portion of the Work that has been Substantially Completed, however, Subcontractor shall not be entitled to any extra compensation on account of Owner's or HOUSTON WATERWORKS TEAM's occupancy or use, nor shall Subcontractor be relieved of any of its responsibilities under this Subcontract, including but not limited to the required times of completion.

4.0 Article 4 – Subcontract Price

4.1 Subcontract Price

Subject to all of the other provisions of this Subcontract, HOUSTON WATERWORKS TEAM shall pay to Subcontractor for the due and full performance of the Work the Subcontract Price. Unless otherwise specified in the Subcontract Documents, the Subcontract Price shall be firm and fixed for the duration of the Subcontract and shall not be increased or decreased on account of any changes in costs of any materials or labor, difficulty in performing the Work, or, on account of changes in any Applicable Law, including, but not limited to, those relating to the payment of taxes.

4.2 Application for Payment

In accordance with the invoicing instructions and requirements of Exhibit C: Pricing, Payment and Change Management, Subcontractor and HOUSTON WATERWORKS TEAM shall agree upon the Work completed in the previous pay period and Subcontractor shall submit to HOUSTON WATERWORKS TEAM an Application for Payment in the format attached hereto as Exhibit C, Attachment C-7-1 Application for Payment. Pricing shall be in accordance with the agreed Schedule of Values and shall be submitted together with a Partial Release of

Lien, in the format attached hereto as Exhibit C, Attachment C-7-2 Partial Waiver and Lien Release. The retention withheld by HOUSTON WATERWORKS TEAM from Subcontractor progress payments is to be reflected on the Application for Payment and shall be in accordance with the percentage stated in the Subcontract

If the Subcontractor requests and receives written approval to include in the Application for Payment materials and equipment not incorporated in the Work but delivered and suitably stored at the Site or at another location, the Application for Payment shall also be accompanied by a bill of sale, invoice or other documentation warranting that Subcontractor has received the materials and equipment free and clear of all Liens and evidence that the materials and equipment are covered by appropriate property insurance and other arrangements to protect HOUSTON WATERWORKS TEAM's and Owner's interest therein.

Application for Payment for Work performed on the basis of unit prices or time and material shall be based on the rates and unit prices established in Exhibit C: Pricing, Payment and Change Management.

4.3 Payment by HOUSTON WATERWORKS TEAM

Subcontractor is required to submit the Application for Payment by the date specified by HOUSTON WATERWORKS TEAM. HOUSTON WATERWORKS TEAM shall pay Subcontractor, within (7) days after receipt of payment from Owner, the amount paid to HOUSTON WATERWORKS TEAM on account of Subcontractor's portion of the Work, the amount to which Subcontractor is entitled less the retention percentage set forth in the Subcontract. Unless otherwise specified in this Subcontract, all payments to Subcontractor shall be made in U.S. Dollars. Timely receipt of submittals and deliverable documents by HOUSTON WATERWORKS TEAM in accordance with the dates and durations agreed in the Subcontract Documents is also a condition precedent to HOUSTON WATERWORKS TEAM's obligation to pay Subcontractor.

4.4 Title to Work

Unless an earlier time is specified in the Subcontract Documents, Subcontractor warrants and guarantees that title to all Work, materials and equipment, whether incorporated in the Project or not, shall pass to the Owner free and clear of all liens, mechanic's liens, claims, security interests or encumbrances (Liens) when Subcontractor receives payment for those items from HOUSTON WATERWORKS TEAM.

4.5 Payment Not Acceptance

No progress payment shall constitute or imply an acceptance of any portion of the Work.

4.6 Right to Withhold

HOUSTON WATERWORKS TEAM may withhold all or part of any progress or final payment to Subcontractor for any amounts due HOUSTON WATERWORKS TEAM under this Subcontract, for defective Work that has not been remedied, or for any other breach of this Subcontract. No payment, either progress or final, to Subcontractor by HOUSTON WATERWORKS TEAM shall be construed to be an acceptance of any defective Work.

4.7 Right to Offset

Without waiver or limitation of any of its other rights or remedies under this Subcontract or under Applicable Law, HOUSTON WATERWORKS TEAM may deduct from any amounts due or owing to Subcontractor in connection with this Subcontract (or any other contract or subcontract with HOUSTON WATERWORKS TEAM), any and all amounts owed by Subcontractor to HOUSTON WATERWORKS TEAM or Owner in connection with this Subcontract or any other contract or subcontract with HOUSTON WATERWORKS TEAM or Owner.

4.8 Final Payment

A final payment, consisting of the unpaid balance of the Subcontract Price, including retention, shall be made within forty-five (45) days after the last of the following to occur: (i) Final completion of the Work by Subcontractor; (ii) final payment by Owner to HOUSTON WATERWORKS TEAM for the Work; (iii) execution and delivery to HOUSTON WATERWORKS TEAM of Exhibit C, Attachment C-7-3 Final Waiver and Release of Lien; (iv) the return of all drawings, plans and specifications to HOUSTON WATERWORKS TEAM when required by this Subcontract; and (v) the delivery of all guaranties, warranties, bonds, instruction manuals, performance charts, diagrams, as-built drawings and similar items with respect to the Work.

4.9 Payment for Labor, Supplies and Material

Subcontractor shall hold payments from HOUSTON WATERWORKS TEAM in trust to be applied first to the payment of any entity, including persons and Lower Tier Subcontractors furnishing labor, materials, or services for the Work before using any part thereof for any other purpose. Subcontractor shall, as often as requested by HOUSTON WATERWORKS TEAM, furnish an affidavit on such form as HOUSTON WATERWORKS TEAM may require showing the names and addresses of all entities who shall have furnished portions of the Work and the amount due or to become due to each such person. Progress payments may, in the discretion of HOUSTON WATERWORKS TEAM, be made in the form of checks payable jointly to Subcontractor and such entity. If Subcontractor fails to pay promptly when due, for all labor, services, and materials furnished in connection with the performance of the Work, HOUSTON WATERWORKS TEAM may after five (5) days written notice to Subcontractor, pay the amount of such liabilities and recover such amount from Subcontractor, directly, or by the application of any portion of the Subcontract Price. Subcontractor shall, at the request of HOUSTON WATERWORKS TEAM, provide affidavits on such forms or in such format as HOUSTON WATERWORKS TEAM may require from all entities furnishing labor, materials or services to the effect that they have been paid in full.

4.10 Accounting Records and Audit

All Subcontractor records necessary to support an Application for Payment under this Subcontract, shall be complete current and accurate, by Subcontractor according to Generally Accepted Accounting Principles (GAAP). Such records shall be available for inspection, copying and/or audit by HOUSTON WATERWORKS TEAM or Owner, or their assigned representative during normal business hours until three (3) years after final payment. Subcontractor shall grant HOUSTON WATERWORKS TEAM or Owner or their designated representative access to its premises and all Subcontractor records, books, correspondence, instructions, drawings, bids, proposals for bids, receipts, vouchers, memoranda and similar data (in hard copy or electronic form) relating to Subcontractor's performance and costs of the Work. The cost of auditing shall be borne by HOUSTON WATERWORKS TEAM or Owner, except when an audit discloses inappropriate charges.

For Work performed on a time and material basis, Subcontractor's books and records shall include time cards and other records relating to the time of Subcontractor personnel spent on the Work and any expenditure made by Subcontractor for which Subcontractor shall request reimbursement from HOUSTON WATERWORKS TEAM.

4.11 Taxes

Unless otherwise provided in the Subcontract Documents, Subcontractor shall pay all taxes of every kind now or hereafter imposed, levied, or assessed by any Governmental Authority with respect to the Work, including taxes for labor, materials, and equipment and all sales, use, personal property, excise, income, and payroll taxes. Upon request of HOUSTON WATERWORKS TEAM, Subcontractor shall furnish satisfactory evidence of having made such payments.

5.0 Article 5 - Warranties

5.1 No Liens

Subcontractor warrants and guarantees that title to the Work and all materials and equipment provided by Subcontractor in connection with the Work shall pass free and clear of all liens and that none of the Work, materials or equipment shall be acquired by Subcontractor subject to any lien by any person or entity.

To the fullest extent permitted by Applicable Law, Subcontractor, for itself, its Lower Tier Subcontractors, employees and servants waives and releases any and all rights of mechanic's liens and similar rights for payment in connection with the Work.

Subcontractor agrees to execute and to obtain from its Lower Tier Subcontractor(s) such documentation as is required by HOUSTON WATERWORKS TEAM or Owner, including but not limited to partial and complete waivers and releases of liens, to the extent and in such form as may be designated by HOUSTON WATERWORKS TEAM or Owner.

If any lien is claimed relating to the Work, within five (5) calendar days after receipt of notice of the existence of a lien or claim of lien pursuant to this Article, Subcontractor shall cause the same to be satisfied, released and removed at Subcontractor's sole cost and expense. Notwithstanding anything to the contrary herein, HOUSTON WATERWORKS TEAM and Owner reserve the right to deal directly with any of Subcontractor's Lower Tier Subcontractors, their respective employees and servants, and may settle, satisfy or litigate any and all liens, claims of lien, or rights of lien at Subcontractor's sole expense.

If Subcontractor fails to satisfy, release and remove of record any lien, claim of lien or rights of lien, HOUSTON WATERWORKS TEAM may, notwithstanding Subcontractor's defense thereto and without liability to HOUSTON WATERWORKS TEAM, retain out of any payment due or to become due to Subcontractor thereafter, an amount equal to HOUSTON WATERWORKS TEAM and Owner's total payments by reason of any such lien, claim of lien or rights of lien, including all attorney's fees and other expenses, as well as the amount of any premium for any bond required by HOUSTON WATERWORKS TEAM or Owner to obtain discharge of any lien, or for the interest on any money deposited for the purpose of discharging any lien.

5.2 General Warranties

Subcontractor warrants that: (i) all materials, equipment, and other items comprising the Work shall be new (except as otherwise specified or agreed to in advance in writing by HOUSTON WATERWORKS TEAM) and to the quality specified, or, to the best standards commonly used in the industry; (ii) the Work shall: (a) be free from defects in design, material, and workmanship; (b) be furnished in accordance with Applicable Law and Good Practices; (c) strictly conform to this Subcontract; and (d) be safe and suitable for the particular purpose for which it is to be used **except to the extent of the defects found to be a result of HOUSTON WATERWORKS design or the design of any HOUSTON WATERWORKS TEAM design subconsultants**. Subcontractor also warrants that all documentation to be provided by Subcontractor and any Lower Tier Subcontractor(s) shall be complete and accurate and may be relied upon by HOUSTON WATERWORKS TEAM and/or the Owner for operation and maintenance of the Facility.

5.3 Warranty Period

Unless otherwise set forth in the Subcontract Documents, the warranty of title has no expiration date, and all other warranties shall commence for twelve (12) months after Owner's declaration of completion of **the Work** unless notice is given to Subcontractor prior to the end of such twelve (12) month period that a warranty claim exists or Subcontractor reasonably knows that a warranty claim may exist. Any corrective action taken by Subcontractor under these warranties shall be similarly warranted for twelve (12) months from the date corrective action is completed or the remainder of the normal warranty period, whichever is longer. If any defective Work is covered by Subcontractor's warranties, HOUSTON WATERWORKS TEAM shall have the option to reject and return defective Work at Subcontractor's expense or require Subcontractor to correct such defective Work at Subcontractor's sole risk and expense. Subcontractor's corrective action shall be subject to HOUSTON WATERWORKS TEAM's and Owner's approval and shall be performed in accordance with applicable specifications and Good Practices. Subcontractor's actions shall include any necessary adjustments, modifications, change of design, removal, repair, replacement or installation, and Subcontractor shall provide all necessary parts, materials, tools, equipment, transportation and labor. Subcontractor shall perform the corrective Work at the Site so as to minimize the loss of use of the Project and Subcontractor shall not interfere with the conduct of the business or operations of HOUSTON WATERWORKS TEAM or the Owner.

5.4 Testing

Subcontractor at its sole expense shall perform any tests that the HOUSTON WATERWORKS TEAM may reasonably require to verify that the Subcontractor's repair, replacement, or other corrective action for defective Work complies with this Subcontract.

5.5 HOUSTON WATERWORKS TEAM Corrective Action

If, after three (3) calendar days written notice from HOUSTON WATERWORKS TEAM, Subcontractor fails to take corrective action on defective Work, as required by HOUSTON WATERWORKS TEAM, or if any emergency exists requiring it to do so, HOUSTON WATERWORKS TEAM may take corrective action. If HOUSTON WATERWORKS TEAM takes corrective action, Subcontractor shall reimburse HOUSTON WATERWORKS TEAM all costs, including costs for direct labor and applicable overhead, material, tools, equipment, subcontracts and transportation. Such corrective action by HOUSTON WATERWORKS TEAM shall not void Subcontractor's warranties and shall not result in the waiver of any of HOUSTON WATERWORKS TEAM's other rights or remedies.

5.6 Lower Tier Subcontractor Warranties

Subcontractor shall obtain warranties against defects in Work from every Lower Tier Subcontractor in accordance with this Subcontract.

6.0 Article 6 – Testing and Defective Work

6.1 Access to Construction

Owner, HOUSTON WATERWORKS TEAM, HOUSTON WATERWORKS TEAM's consultants, other representatives and personnel of HOUSTON WATERWORKS TEAM, independent testing laboratories, and Governmental Authorities shall have access to the Work at any location where Work is in progress at reasonable times for their observation, inspection, and testing. Subcontractor shall provide them proper access to the Work and advise the representatives of Subcontractor's safety procedures.

HOUSTON WATERWORKS TEAM will appoint a Representative or Representatives to perform inspections, tests, and other services specified in Part 3 of the Specifications to establish Subcontractor's general conformance with the Contract Documents.

Subcontractor at its expense shall provide testing services identified in Part 2 of the Specifications. HOUSTON WATERWORKS TEAM will provide at its expense an Independent Testing Laboratory for construction materials testing. Subcontractor, at its expense and without interruption shall provide all facilities, samples, documents, reports, and certifications necessary to establish conformance with the Contract Documents.

Failure to inspect, test or discover defective Work shall not prejudice the rights of HOUSTON WATERWORKS TEAM or Owner to correct the Work at Subcontractor's expense or to reject such Work, and shall not relieve Subcontractor of any responsibilities under this Subcontract.

6.2 Uncovering of Work

If a portion of the Work is covered contrary to HOUSTON WATERWORKS TEAM's request, it must, if required by HOUSTON WATERWORKS TEAM, be uncovered for HOUSTON WATERWORKS TEAM's observation and be replaced at the expense of Subcontractor without change in the Project Schedule or Subcontract Price. If HOUSTON WATERWORKS TEAM has not specifically requested to observe a portion of the Work prior to it being covered, HOUSTON WATERWORKS TEAM may require that such Work be uncovered by Subcontractor. If such Work is in accord with this Subcontract, the costs of uncovering and replacement shall be adjusted by appropriate Change Order. If such Work is not in accord with this Subcontract, Subcontractor shall pay such costs.

6.3 Work Rejected by HOUSTON WATERWORKS TEAM

Subcontractor shall promptly correct Work rejected by HOUSTON WATERWORKS TEAM that fails to conform to the requirements of this Subcontract, whether observed before or after Completion. Subcontractor shall bear the costs of correcting such non-conforming Work. HOUSTON WATERWORKS TEAM may accept Work that is not in accord with the requirements of this Subcontract and reduce the Subcontract Price accordingly. Such adjustment shall be effected whether or not final payment has been made.

6.4 Removal of Work

Subcontractor shall remove from the Site portions of the Work that are not in accord with the requirements of this Subcontract and are neither corrected by the Subcontractor nor accepted by the HOUSTON WATERWORKS TEAM.

6.5 Risk of Loss

Subcontractor shall preserve and protect all materials and equipment installed or to be installed into the Work until Final Completion and acceptance by HOUSTON WATERWORKS TEAM and that it shall make good or replace at no expense to HOUSTON WATERWORKS TEAM or Owner any damage to or loss of its Work from any cause whatsoever that occurs prior to Final Completion.

7.0 Article 7 - Changes

7.1 HOUSTON WATERWORKS TEAM May Request Changes

HOUSTON WATERWORKS TEAM, without invalidating this Subcontract, may order changes in the scope or manner of performing the Work and the Subcontract Price and the times for completion of the Work may be adjusted accordingly. All such changes in the Work shall be in accordance with the provisions of Exhibit C: Pricing, Payment and Change Management. Subcontractor shall not perform changes in the Work until it has received written direction from an authorized representative of HOUSTON WATERWORKS TEAM and shall not be paid for changes in the Work until a formal Change Order has been executed. Subcontractor may be instructed by the authorized HOUSTON WATERWORKS TEAM representative to start work on a Time and Material basis for a change in scope, until such time a fixed lump sum price is agreed. The agreed lump sum price shall be used in a Change Order and shall replace the time and material records which no longer apply.

7.2 Request for Additional Cost or Time

If Subcontractor wishes to make a request for an increase in the Subcontract Price or for an extension of the times for completion of the Work as a result of changes to the Work (including, but not limited to, any claim for loss of production or impact upon the Project Schedule, any Milestone or other deadline), Subcontractor shall give HOUSTON WATERWORKS TEAM written notice thereof by submitting a Change Order Request Form (Attachment C-8-1) no later than five (5) calendar days after the occurrence of the event giving rise to such request. This notice shall be given by Subcontractor before proceeding to execute the Work, except in the case of an emergency endangering life or property in which case Subcontractor shall act, at its discretion, to prevent threatened damage, injury or loss. Change Order Requests that may arise, or, arise from a delay realized by Subcontractor shall be made within five (5) calendar days after the delay is identified. Subcontractor shall not be entitled to a Change Order if it fails to submit a request for same in accordance with the time deadlines set forth above. Any change in the Subcontract Price or the times for completion of the Work resulting from such request shall be authorized by Change Order. No adjustments shall be made for any changes performed by Subcontractor or any Lower Tier Subcontractor(s) that have not been ordered in writing by HOUSTON WATERWORKS TEAM. Delays that may cause additional cost, or time, should be notified to HOUSTON WATERWORKS TEAM as soon as they are and/or minimize such delays.

7.3 Changes to the Subcontract Price

Any Change Order Request or claim for an adjustment in the Subcontract Price will be determined at the sole discretion of HOUSTON WATERWORKS TEAM choice as follows:

- 7.3.1 By mutually agreed lump sum properly itemized and supported by sufficient substantiating data to permit evaluation or;
- 7.3.2 By Unit Prices contained in Exhibit C: Pricing, Payment and Change Management of this Subcontract or,
- 7.3.3 On a Time and Material basis as set forth in Exhibit C: Pricing, Payment and Change Management.

7.4 Documentation

Whenever the cost of any Change Order Work is to be determined by Unit Prices or when directed to proceed by HOUSTON WATERWORKS TEAM in accordance with Article 7.1, Subcontractor shall maintain records thereof in accordance with generally accepted accounting practices as per Article 4.10 and submit, in a form acceptable to HOUSTON WATERWORKS TEAM, an itemized cost breakdown together with supporting data along with signed daily time sheets, approved daily by HOUSTON WATERWORKS TEAM.

7.5 Changes to the Subcontract Times

Notwithstanding anything to the contrary in this Subcontract, Subcontractor shall only be entitled to an extension of any of the Subcontract times as shown in the Exhibit D: Schedule, if such delay, disruption, hindrance, actually affects a critical path activity and delays achievement of any Milestone Dates or deadline set forth in the Project Schedule as determined based upon the following criteria, all of which must be established:

- 7.5.1 Such delay, disruption, hindrance, or acceleration (or the aggregate thereof) in fact causes, and is responsible for, a change in the ability of Subcontractor to achieve a Milestone by the Milestone date or the applicable deadline;
- 7.5.2 Subcontractor uses reasonable efforts to maintain the applicable deadline as if the delay, disruption, hindrance, or acceleration had not occurred; and
- 7.5.3 Subcontractor demonstrates specific actions taken to work around or mitigate the impact of the delay, disruption, hindrance, or acceleration on the applicable deadline.
- 7.5.4 If more than one event causes delay and the cause of at least one of the events, but not all of them, is a cause of delay which would not entitle the Subcontractor to an extension of time under this Subcontract, then, to the extent of the concurrent delay, the Subcontractor **shall be** entitled to an extension of time **in proportion to the fault of the concurrent delay caused by HOUSTON WATERWORKS TEAM or Owner on the same activity of the Subcontractor's activity path.**
- 7.5.5 If a delay, disruption, hindrance, or acceleration causes a delay in any applicable deadline, as demonstrated as set forth herein, the affected deadline shall be extended only by the direct and immediate time impact associated with the act or event causing the delay.

8.0 Article 8 – Indemnity and Limitation of Damages

8.1 Performance Indemnity

TO THE FULLEST EXTENT PERMITTED BY LAW, SUBCONTRACTOR SHALL PROTECT, DEFEND, INDEMNIFY AND HOLD HARMLESS HOUSTON WATERWORKS TEAM AND OWNER, INCLUDING THEIR OFFICERS, AGENTS, EMPLOYEES, AFFILIATES, SUBSIDIARIES, AND OTHER SUBCONTRACTORS FROM AND AGAINST ANY AND ALL **THIRD-PARTY** CLAIMS, LIABILITIES, DEMANDS, CAUSES OF ACTION, DAMAGES, LOSSES, COSTS, EXPENSES, SUITS, FORFEITURES, PENALTIES, JUDGMENTS, AND ASSOCIATED EXPENSES (INCLUDING ATTORNEY'S FEES) IN LAW OR IN EQUITY, OF EVERY KIND AND NATURE WHATSOEVER ARISING OUT OF, RESULTING FROM, OR IN CONNECTION WITH SUBCONTRACTOR'S PERFORMANCE UNDER THIS SUBCONTRACT, INCLUDING BUT NOT LIMITED TO, BODILY INJURY, EMOTIONAL INJURY, SICKNESS, DISEASE, OR DEATH, OR TO INJURY TO OR DESTRUCTION OF TANGIBLE PROPERTY (OTHER THAN THE WORK ITSELF) **INCLUDING RESULTING LOSS OF USE**, CAUSED IN WHOLE OR IN PART BY ANY ACT OR OMISSION OF SUBCONTRACTOR OR ANYONE DIRECTLY OR INDIRECTLY EMPLOYED BY SUBCONTRACTOR OR FOR ANYONE FOR WHOSE ACTS SUBCONTRACTOR MAY BE LIABLE, REGARDLESS OF WHETHER IT IS CAUSED IN PART BY AN INDEMNIFIED PARTY. SUCH OBLIGATION SHALL NOT BE CONSTRUED TO NEGATE, ABRIDGE OR OTHERWISE REDUCE ANY OTHER RIGHT OR OBLIGATION OF INDEMNITY WHICH WOULD OTHERWISE EXIST AS TO ANY PARTY OR PERSON DESCRIBED IN THIS ARTICLE.

THESE INDEMNIFICATION PROVISIONS SHALL APPLY TO CLAIMS WHICH ARISE AFTER THIS SUBCONTRACT IS TERMINATED AS WELL AS WHILE IT IS IN FORCE. SUBCONTRACTOR SHALL NOT BE OBLIGATED UNDER THIS SUBCONTRACT TO INDEMNIFY HOUSTON WATERWORKS TEAM OR OWNER FOR CLAIMS ARISING FROM THE SOLE NEGLIGENCE OR WILLFUL MISCONDUCT OF HOUSTON WATERWORKS TEAM OR OWNER, THEIR AGENTS, EMPLOYEES OR OTHER SUBCONTRACTORS OR CONTRACTORS DIRECTLY RESPONSIBLE TO HOUSTON WATERWORKS TEAM OR OWNER.

NOTWITHSTANDING ANYTHING TO THE CONTRARY, THE LIABILITY OF SUBCONTRACTOR FOR THE OWNER'S OR HOUSTON WATERWORKS TEAM'S CONCURRENT NEGLIGENCE PURSUANT TO THIS ARTICLE 8.1 SHALL NOT EXCEED \$1,000,000 PROVIDED THAT ATTORNEYS' FEES, COURT COSTS, AND ALL OTHER DEFENSE COSTS AND INTEREST SHALL BE EXCLUDED FROM THIS LIMIT OF LIABILITY.

8.2 Intellectual Property Indemnity

SUBCONTRACTOR AGREES TO DEFEND, INDEMNIFY AND HOLD HOUSTON WATERWORKS TEAM, OWNER, AND ALL OF THEIR OTHER SUBCONTRACTORS AND CONTRACTORS, AND THEIR RESPECTIVE AFFILIATES, SUBSIDIARIES, ASSIGNS, SUCCESSORS, OFFICERS, DIRECTORS, EMPLOYEES AND AGENTS HARMLESS FROM AND AGAINST ANY AND ALL CLAIMS WHATSOEVER ARISING FROM OR IN ANY MANNER RELATED TO AN INFRINGEMENT OF PATENTS OR THE IMPROPER USE OF OTHER PROPRIETARY RIGHTS THAT MAY OCCUR IN CONNECTION WITH SUBCONTRACTOR'S OR ANY LOWER TIER SUBCONTRACTOR'S PERFORMANCE OF WORK PURSUANT TO THIS SUBCONTRACT AND THE OWNERSHIP OR USE OF ANY PORTION OF THE PROJECT UNLESS SUCH INFRINGEMENT OR IMPROPER USE IS AT THE DIRECTION OF HOUSTON WATERWORKS TEAM AND NOT OTHERWISE CONTEMPLATED HEREUNDER. HOUSTON WATERWORKS TEAM'S ACCEPTANCE OF SUBCONTRACTOR'S ENGINEERING, DESIGN AND/OR PROPOSED OR SUPPLIED EQUIPMENT AND MATERIALS SHALL NOT BE CONSTRUED TO RELIEVE SUBCONTRACTOR OF ANY OBLIGATION HEREUNDER. SHOULD ANY SUCH CLAIM MATERIALLY IMPAIR SUBCONTRACTOR'S OR HOUSTON WATERWORKS TEAM'S PERFORMANCE OF THE WORK OR THE PROJECT OR OPERATION OR USE OF THE PROJECT BY OWNER THEN SUBCONTRACTOR SHALL, AT ITS OWN EXPENSE, USE COMMERCIALY REASONABLE EFFORTS TO PROMPTLY PROCURE THE RIGHT TO CONTINUE ITS OR HOUSTON WATERWORKS TEAM'S PERFORMANCE OF THE WORK OR THE PROJECT SO AS NOT TO MATERIALLY IMPAIR THE SCHEDULE FOR COMPLETION OF THE PROJECT OR PROMPTLY PROCURE FOR OWNER THE RIGHT TO CONTINUE OPERATION OF THE PROJECT.

8.3 Indemnity for Violation of Applicable Laws

SUBCONTRACTOR AGREES TO INDEMNIFY, DEFEND AND HOLD HARMLESS HOUSTON WATERWORKS TEAM AND OWNER AND ALL THEIR OTHER SUBCONTRACTORS AND CONTRACTORS AND THEIR RESPECTIVE AFFILIATES, SUBSIDIARIES, SUCCESSORS, ASSIGNS, OFFICERS, DIRECTORS, EMPLOYEES, AND AGENTS, FROM AND AGAINST ANY AND ALL LIABILITIES, LOSSES, EXPENSES AND CLAIMS, FINES, AND PENALTIES IMPOSED BY ANY GOVERNMENTAL AUTHORITY THAT ARISE FROM OR RESULT FROM SUBCONTRACTOR'S VIOLATION OF ANY APPLICABLE LAW.

8.4 Indemnity for Hazardous Substances

SUBCONTRACTOR AGREES TO INDEMNIFY, DEFEND AND HOLD HARMLESS HOUSTON WATERWORKS TEAM AND OWNER AND ALL OF THEIR OTHER SUBCONTRACTORS AND CONTRACTORS AND THEIR RESPECTIVE AFFILIATES, SUBSIDIARIES, SUCCESSORS, ASSIGNS, OFFICERS, DIRECTORS, EMPLOYEES, AND AGENTS, FROM AND AGAINST ANY AND ALL LIABILITIES, LOSSES, EXPENSES AND CLAIMS FOR PERSONAL INJURY OR PROPERTY DAMAGE THAT ARISE FROM OR OUT OF SUBCONTRACTOR'S USE, HANDLING, OR DISPOSAL OF HAZARDOUS MATERIALS BROUGHT ONTO THE SITE BY SUBCONTRACTOR OR FOR WHICH SUBCONTRACTOR IS RESPONSIBLE FOR TRANSPORTING, HANDLING, OR OTHERWISE DISPOSING AS PART OF THE WORK OR A CHANGE ORDER.

8.5 Indemnity for Liens

IF ANY PERSON WHO HAS PERFORMED ANY PORTION OF THE WORK FILES, CLAIMS OR ASSERTS ANY LIEN UPON THE PROJECT OR THE WORK, SUBCONTRACTOR SHALL INDEMNIFY, DEFEND AND HOLD HOUSTON WATERWORKS TEAM AND OWNER HARMLESS FROM ANY AGAINST CLAIMS, LOSSES OR EXPENSES (INCLUDING ATTORNEY'S FEES AND COSTS) INCURRED IN CONNECTION WITH ANY SUCH LIEN.

8.6 Limitation of Liability

IF AND TO THE EXTENT THAT A CLAIM IS MADE BY AN EMPLOYEE OF SUBCONTRACTOR OR ANY OF ITS LOWER TIER SUBCONTRACTOR(S) AGAINST AN INDEMNIFIED PARTY NAMED IN THIS ARTICLE 8, SUBCONTRACTOR SHALL INDEMNIFY SUCH INDEMNIFIED PARTY TO THE SAME EXTENT AS IF THE CLAIM HAD BEEN MADE BY A THIRD PARTY THAT IS NOT AN EMPLOYEE OF SUBCONTRACTOR OR ITS LOWER TIER SUBCONTRACTOR OR SUPPLIER. SPECIFICALLY, SUBCONTRACTOR WAIVES ANY DEFENSE OR IMMUNITY IT MAY HAVE (INCLUDING ANY LIMITATION ON THE AMOUNT OR TYPE OF DAMAGES, COMPENSATION OR BENEFITS PAYABLE BY OR FOR SUBCONTRACTOR) UNDER ANY APPLICABLE WORKERS' COMPENSATION LAWS, INDUSTRIAL ACCIDENT LAWS, OR OTHER STATUTES AND JUDICIAL DECISIONS DISALLOWING OR LIMITING INDEMNIFICATION AND HEREBY CONSENTS TO SUCH INDEMNITY OBLIGATION.

8.7 No Consequential Damages

IN NO EVENT SHALL EITHER PARTY BE LIABLE TO THE OTHER PARTY FOR THE OTHER PARTY'S INCIDENTAL, SPECIAL, CONSEQUENTIAL OR PUNITIVE DAMAGES ARISING UNDER OR RELATED TO THIS AGREEMENT, INCLUDING, BUT NOT LIMITED TO, LOST REVENUE OR LOST PROFIT, WHETHER SUCH LIABILITY IS CLAIMED TO ARISE IN CONTRACT, TORT (INCLUDING BUT NOT LIMITED TO NEGLIGENCE), STRICT OR STATUTORY LIABILITY, OR OTHERWISE.

9.0 Article 9 - Insurance

9.1 Subcontractor's Insurance

Before commencing Work, and as a condition of payment, Subcontractor shall purchase and maintain in effect all insurance coverage required under this Subcontract at Subcontractor's sole expense and with insurance companies acceptable to HOUSTON WATERWORKS TEAM and with an A.M. Best's rating of A- VII or better. Certificates of insurance evidencing such coverage to be in force shall be filed with HOUSTON WATERWORKS TEAM prior to commencement of the Work and upon renewal of such coverage. HOUSTON WATERWORKS TEAM may at any time require Subcontractor to reaffirm maintenance of such coverage. Failure to comply with this Article and the insurance requirements in this Subcontract shall be grounds for Termination for Cause. These insurance requirements may be increased (but not decreased) due to the insurance requirements of Owner. Subcontractor shall not include Owner as additional insured on any of the required coverage if the Owner is the U.S. federal government.

9.2 Lower Tier Subcontractor Insurance.

Subcontractor shall require the same insurance coverage and limits contained in this Subcontract from all of their Lower Tier Subcontractors. HOUSTON WATERWORKS TEAM may require Subcontractor to provide a copy of the Lower Tier Subcontractor's insurance certificate.

9.3 Number of Policies

Insurance may be arranged under a single policy for the full limits required or by a combination of underlying policies and a Following Form Excess or Umbrella Liability policy.

9.4 Cancellation, Renewal and Modification

Policies shall be endorsed to provide thirty (30) calendar days' notice (except ten [10] days' notice for non-payment of premium) to HOUSTON WATERWORKS TEAM should coverage be cancelled, non-renewed, or reduced in limits or coverage. If HOUSTON WATERWORKS TEAM is not required to be named as an additional insured, it is the Subcontractor's responsibility to notify HOUSTON WATERWORKS TEAM should any required insurance coverage be cancelled, nonrenewed or reduced in coverage or limits.

9.5 Continuation of Coverage

Subcontractor shall continue to carry

- (a) Contractor's Pollution and Liability insurance or any claims made coverage for at least two (2) years after Completion of the Work, and
- (b) Completed operations liability coverage shall be maintained for (10) ten years in accordance with the Texas statute of repose.

Subcontractor shall furnish HOUSTON WATERWORKS TEAM evidence of such insurance prior to final payment and accordance with the above two provisions.

9.6 Subcontractor's Equipment or Tools Property Insurance

Subcontractor shall purchase and maintain all risk property insurance in the form of a Contractor's Equipment or Tool Floater for replacement cost at the time of any loss upon their own, leased or rented equipment and tools. In addition, the Subcontractor's policy must include a waiver of subrogation in favor of HWT and the City of Houston. Subcontractor shall be responsible for any and all deductibles and co-insurance penalties.

9.7 Property or Builder's Risk Insurance

HOUSTON WATERWORKS TEAM or Owner may provide a Builders Risk All Risk insurance policy for the full replacement value of all Work including the value of all onsite Owner-furnished equipment and/or materials associated with the Work. Subcontractor is responsible for the amount of the deductible for any covered loss.

9.7.1 Subcontractor shall determine the adequacy, limits, terms and applicability to Subcontractor's Work of any builder's risk insurance that may be provided or maintained by HOUSTON WATERWORKS TEAM or Owner. Subcontractor shall be responsible for providing any such insurance or supplemental insurance it may desire. In the event of a loss for which an Owner's or HOUSTON WATERWORKS TEAM's builder's risk or fire insurance policy, if any, provides coverage for Subcontractor's Work, and a recovery from such insurance is subsequently secured, HOUSTON WATERWORKS TEAM or Owner **will work with Subcontractor in good faith** for the allocation of such recovery. The initiation or pendency of a claim or recovery under such insurance, if any, shall not be cause for Subcontractor to delay or suspend the performance of any obligation under this Subcontract. Subcontractor shall be responsible for any damage or loss to its own materials, facilities, tools, equipment, plant, scaffolds, bracing, and similar items.

9.7.2 Subcontractor and its insurers shall waive all rights against Owner and HOUSTON WATERWORKS TEAM for damages caused by perils covered by property insurance applicable to the Project, except such rights as it may have to the proceeds of any such insurance. Subcontractor shall require similar waivers from all of their Lower Tier Subcontractors and their insurers in favor of Owner and HOUSTON WATERWORKS TEAM.

- 9.7.3 Subcontractor and its insurers shall waive all rights against HOUSTON WATERWORKS TEAM and Owner for loss or damage to any equipment used in connection with the Project in which loss is covered by any Property or Equipment insurance.
- 9.7.4 Subcontractor shall require similar waivers from its Lower Tier Subcontractors and their insurers in favor of Owner and HOUSTON WATERWORKS TEAM

9.8 Minimum Limits of Liability

The required insurance shall have at least the following minimum limits of liability and coverage. All amounts are stated US Dollars (\$). For coverage provided on a Claims Made Policy Form, the retroactive date must be earlier or concurrent with the effective date of the Subcontract.

9.8.1	Workers' Compensation	
	<i>a</i>	<i>Worker's compensation</i> <i>Statutory Limits</i>
9.8.2	Employer's Liability or Stop-gap	
	<i>a</i>	<i>Bodily Injury by Accident</i> <i>\$1,000,000 each accident</i>
	<i>b</i>	<i>Bodily Injury by Disease</i> <i>\$1,000,000 policy limit</i>
	<i>c</i>	<i>Bodily Injury by Disease</i> <i>\$1,000,000 each employee</i>
	Insurance provided in response to Articles 9.8.1 and 9.8.2 shall include Waiver of Subrogation in favor of HOUSTON WATERWORKS TEAM and Owner.	

9.8.3	Commercial General Liability Insurance (including Explosion, Collapse and Underground (XCU), Products/Completed Operations, and Contractual Liability for indemnity provisions that are insurable under this Subcontract . If the Subcontract Price is One Million Dollars (\$1,000,000) or less the following limits shall apply	
	<i>a</i>	<i>Each Occurrence Limit</i> <i>\$1,000,000</i>
	<i>b</i>	<i>General Aggregate (per project)</i> <i>\$1,000,000</i>
	<i>c</i>	<i>Products/Completed Operations Aggregate</i> <i>\$1,000,000</i>
	<i>d</i>	<i>Personal and Advertising Injury Limit</i> <i>\$1,000,000</i>
	<i>e</i>	<i>HOUSTON WATERWORKS TEAM and Owner as Additional Insured - copy of the endorsement must be attached to the certificate of insurance</i>
	<i>f</i>	<i>Waiver of Subrogation in favor of HOUSTON WATERWORKS TEAM and Owner - copy of the endorsement must be attached to the certificate of insurance</i>
	<i>g</i>	<i>Coverage shall be Primary and Non-contributory</i>
	<i>h</i>	<i>Policy shall not contain any exclusions for or restrictions pertaining to Cross Liability and/or Separation of Insureds</i>
	If the Subcontract Price is between One Million Dollars (\$1,000,000) and Three Million Dollars (\$3,000,000), the limits specified in this Article 9.8.3 shall increase to Three Million Dollars (\$3,000,000). If the Subcontract Price exceeds Three Million Dollars (\$3,000,000), the limits specified in this Article 9.8.3 shall increase to Five Million Dollars (\$5,000,000).	

9.8.4	Commercial Automobile Liability Insurance.	
	Check the "Excess/Umbrella Liability box on Supplement to increase the Auto Liability limit to \$2-\$5M when contract size or scope of work warrants an increase in the Auto Liability limit). Subcontract Price is One Million Dollars (\$1,000,000) or less the following limits shall apply:	
	<i>a</i>	<i>combined single limit per accident</i> <i>\$1,000,000</i>
		<i>or</i>
	<i>b</i>	<i>Bodily Injury per person</i> <i>\$1,000,000</i>
		<i>Property Damage per accident</i> <i>\$1,000,000</i>
	<i>c</i>	<i>HOUSTON WATERWORKS TEAM and Owner as Additional Insured</i>
	<i>d</i>	<i>Waiver of Subrogation in favor of HOUSTON WATERWORKS TEAM and Owner</i>
	<i>e</i>	<i>Coverage shall be Primary and Non-contributory</i>
	If the Work being performed under this Agreement involves transporting of hazardous or regulated substances, hazardous or regulated wastes and/or hazardous or regulated materials, Contractor and its subcontractors engaged to perform, in part or whole, such activities shall provide coverage with a limit of five million dollars	

	(\$5,000,000) per accident combined single limit covering transportation of such materials by addition to the Business Auto Liability Policy of Environmental Impairment Endorsement MCS-90 Endorsement and CA 99 48 Pollution Liability – Broadened Coverage Endorsement, which amends the pollution exclusion in the standard Business Automobile Policy to cover pollutants that are in or upon, being transported or towed by, being loaded onto, or being unloaded from a covered auto.
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9.8.5	Contractor's Pollution Liability		
	If the Subcontract Price is One Million Dollars (\$1,000,000) or less the following limits shall apply:		
	a	Per Claim or per Occurrence	\$1,000,000
	b	Aggregate	\$1,000,000
	c	HOUSTON WATERWORKS TEAM and Owner as Additional Insured	
	d	Waiver of Subrogation in favor of HOUSTON WATERWORKS TEAM and Owner	
	e	Coverage shall be Primary and Non-contributory	
	f	Cross Liability and/or Separation of Insureds	
	g	Non-Owned Disposal Sites	
	h	Transportation/Hauling	
	If the Subcontract Price is between One Million Dollars (\$1,000,000) and Three Million Dollars (\$3,000,000), the limits specified in this Article 9.8.5 shall increase to Three Million Dollars (\$3,000,000). If the Subcontract Price exceeds Three Million Dollars (\$3,000,000), the limits specified in this Article 9.8.5 shall increase to Five Million Dollars (\$5,000,000).		
9.8.6	Supplemental Insurance. The following insurance coverage and requirements are in addition to the insurance in this Article and are required to remain in full force and effect. All required coverage shall be provided by an insurance company with an AM Best rating of "A- VII" or better. A check mark next to the following insurance coverage(s) indicates that the item(s) is incorporated into this Subcontract.		

Checked boxes are applicable to this Subcontract.

<input type="checkbox"/>	Aviation Liability – required for owned and/or non-owned aircraft (Note: if scope of work is aerial photography/surveying and there are no passengers (pilot only) a \$1M limit is acceptable.
a	Per Passenger \$5,000,000 or \$1,000,000 for aerial photography/surveying and no passengers (pilot only)
b	HOUSTON WATERWORKS TEAM and Owner as Additional Insured
c	Waiver of Subrogation in favor of HOUSTON WATERWORKS TEAM and Owner
d	Coverage shall be primary and non-contributory

<input type="checkbox"/>	Aviation Hull Damage – required for the owner/operator of the aircraft – covers the plane itself.
a	Waiver of Subrogation in favor of HOUSTON WATERWORKS TEAM and Owner
b	Hull coverage with limits to the value of the plane or aircraft owner waives any claim for property damage to the Aircraft as against Owner and HOUSTON WATERWORKS TEAM and its employees, even if caused by their negligence or breach of contract

<input type="checkbox"/>	Excess/Umbrella – Required to increase primary Employer’s Liability, General Liability and Auto Liability Note: Working above (1) one story, such as installing scaffolding, requires a \$5M general liability and Employer’s Liability limit		
	a	<i>Per Occurrence</i>	\$5,000,000
	b	<i>Aggregate</i>	\$5,000,000

<input type="checkbox"/>	General Liability - Movement of Traffic Service		
	a	<i>Per Occurrence</i>	\$10,000,000
	b	<i>Aggregate</i>	\$10,000,000
	c	<i>Additional Insured naming HOUSTON WATERWORKS TEAM and Owner</i>	
	d	<i>Waiver of Subrogation in favor of HOUSTON WATERWORKS TEAM and Owner</i>	
	e	<i>Coverage shall be Primary and Non-contributory</i>	

<input type="checkbox"/>	General Liability - Working within fifty (50) feet of a railroad		
	a	<i>The exclusion under the Contractual Liability section of the General Liability policy must be deleted</i>	
	b	<i>ISO form CG 24 17 Contractual Liability – Railroads (or its equivalent) must be evidenced on the certificate of insurance</i>	

<input type="checkbox"/>	Professional Liability – coverage required due to Scope of Work including design or other professional services – the \$1,000,000 requirement can be increased due to scope of work or contract amount including design or other professional services.		
	a	<i>Per Claim</i>	\$1,000,000
	b	<i>Aggregate</i>	\$1,000,000

<input type="checkbox"/>	Railroad Protective – coverage required by the railroad when working within 50 feet of a railroad track. The Named Insured on the Railroad Protective policy is the railroad. Coverage may be extended to cover all Lower Tier Subcontractor(s). Coverage may be purchased from the railroad. Required Limits shall be stated by the railroad and are commonly:		
	a	<i>Per Occurrence</i>	\$2,000,000
	b	<i>Aggregate</i>	\$6,000,000

<input type="checkbox"/>	On-Hook/Rigger’s Liability - Insurance covering Subcontractor's liability for the full replacement value of the property Subcontractor is lifting or moving with a crane. A minimum limit of One Hundred Thousand Dollars (\$100,000.00) is required where the value of the lifts do not exceed One Hundred Thousand Dollars (\$100,000.00). The coverage may be provided by (i) a Rigger’s Liability Policy, (ii) attaching a Riggers Liability Endorsement to the Commercial General Liability Policy that modifies or deletes the exclusion for damage to property in the insured's "care, custody or control," or by (iii) attaching a floater to Subcontractor's inland marine policy that adds coverage for damage to property of others while in Subcontractor's care, custody, or control.		
	a	<i>HOUSTON WATERWORKS TEAM and Owner as Additional Insured</i>	
	b	<i>Waiver of Subrogation in favor of HOUSTON WATERWORKS TEAM and Owner</i>	
	c	<i>Coverage shall be primary and non-contributory.</i>	

<input type="checkbox"/>	Technology Errors & Omissions Coverage – such insurance to include any negligent acts in the delivery of products and services	
a	<i>Per claim</i>	\$1,000,000
b	<i>Aggregate</i>	\$1,000,000
c	<i>Additional Insured naming HOUSTON WATERWORKS TEAM and Owner</i>	
d	<i>Waiver of Subrogation in favor of HOUSTON WATERWORKS TEAM and Owner</i>	

<input type="checkbox"/>	Watercraft Charter Rental or Ownership – Protection and Indemnity (P & I), Tower's Liability (if towing any vessel) – required for the owner/operator of the watercraft (see Workers' Compensation requirements when working on water also). The \$1,000,000 requirement can be increased due to scope of work or contract amount	
a	<i>Per occurrence</i>	\$1,000,000
b	<i>Aggregate</i>	\$1,000,000
c	<i>Additional Insured naming HOUSTON WATERWORKS TEAM and Owner</i>	
d	<i>Waiver of Subrogation in favor of HOUSTON WATERWORKS TEAM and Owner</i>	
e	<i>Coverage shall be primary and non-contributory</i>	

<input type="checkbox"/>	Watercraft Charter, Rental or Ownership – Hull Damage – required for the owner/operator of the watercraft and covers the boat itself. Hull coverage with limits to the value of the watercraft unless watercraft owner provides written waiver of any claim for property damage to the watercraft as against Owner and HOUSTON WATERWORKS TEAM and their employees, even if caused by their negligence or breach of contract in a form acceptable to HOUSTON WATERWORKS TEAM.	
<input type="checkbox"/>	Alternate Employer's Endorsement – endorsement required when employees are seconded, lent or leased to another employer	
<input type="checkbox"/>	Jones Act or Maritime Coverage – required coverage for anyone (sole proprietors included) that is crew on a vessel	
a	<i>Limit</i>	<i>Statutory</i>
b	<i>Waiver of Subrogation in favor of HOUSTON WATERWORKS TEAM and Owner</i>	

<input type="checkbox"/>	U.S. Longshore and Harbor Workers' Compensation Act (USL&H) - required coverage for anyone (sole proprietors included) working on navigable waters including shore and dock activities	
a	<i>Limit</i>	<i>Statutory</i>
b	<i>Waiver of Subrogation in favor of HOUSTON WATERWORKS TEAM and Owner</i>	

10.0 Article 10 – Performance and Payment Bonds

10.1 Performance and Payment Bonds

Unless otherwise indicated in the Subcontract Documents, Subcontractor shall, at its own expense, obtain from a commercial surety acceptable to HOUSTON WATERWORKS TEAM a Performance Bond, Attachment GC-1 and Payment Bond, Attachment GC-2, in the format attached hereto as separate bonds: (i) for the due and complete performance of Subcontractor's obligations hereunder (performance bond), and (ii) for the timely payment of all charges for labor, services, and materials furnished for the prosecution of the Work (payment bond). Each such bond shall be for a sum equal to one hundred percent (100%) of the Subcontract Price. Such bonds shall be delivered to HOUSTON WATERWORKS TEAM prior to commencing the Work and within seven (7) calendar days after the Effective Date of this Subcontract. If the premium expense for such bonds is not included in the Subcontract Price as indicated above, Subcontractor shall submit to HOUSTON WATERWORKS TEAM the Surety's invoice for such bonds. Upon presentation of satisfactory bonds, HOUSTON WATERWORKS TEAM shall pay the lesser of either the invoice amount or other such bond premium amount as set forth in this Subcontract. At HOUSTON WATERWORKS TEAM's option, such payment may be made to Subcontractor or directly to the Surety. If Subcontractor performs Work prior to providing the bonds required of Subcontractor pursuant to this Subcontract, Subcontractor warrants and represents to HOUSTON WATERWORKS TEAM that it has the ability to obtain such bonds and further that it shall continue to perform the Work through the Final Completion without further payment from HOUSTON WATERWORKS TEAM until such bonds are provided or the Work is finally complete. Subcontractor shall indemnify, defend and hold HOUSTON WATERWORKS TEAM harmless from any and all claims that arise out of or relate in any way to Subcontractor's failure to obtain the bonds required of Subcontractor pursuant to this Subcontract.

10.2 Financial Information

If Subcontractor is not required to furnish performance and payment bonds, Subcontractor shall furnish reasonable evidence satisfactory to HOUSTON WATERWORKS TEAM that sufficient funds are available and committed for Subcontractor's performance of the Work, including performance of its warranty obligations hereunder. HOUSTON WATERWORKS TEAM reserves the right at any time to require Subcontractor to furnish such bonds at HOUSTON WATERWORKS TEAM's expense. HOUSTON WATERWORKS TEAM further reserves the right at any time to request written assurances, satisfactory to HOUSTON WATERWORKS TEAM, of Subcontractor's intent and ability to perform all of Subcontractor's obligations as set forth herein.

10.3 Contractor/Subcontractor Default Insurance (CDI).

HOUSTON WATERWORKS TEAM may, at its option, provide Contractor Default Insurance (CDI) for this Subcontract. In such event the premiums for the CDI coverage shall be paid by HOUSTON WATERWORKS TEAM and Subcontractor shall not be required to provide any Payment and Performance bonds and shall not be permitted to charge HOUSTON WATERWORKS TEAM for the cost of any such bonds.

11.0 Article 11 - Termination

11.1 Termination for Convenience

Upon five (5) calendar days written notice to Subcontractor, HOUSTON WATERWORKS TEAM may, without cause and without prejudice to any other right or remedy of HOUSTON WATERWORKS TEAM, elect to terminate the Subcontract in whole or in part. Upon any such termination, Subcontractor agrees to waive any and all claims for damages, including, but not limited to, loss of anticipated profits on account thereof. Upon receipt of any such termination notice and unless the notice directs otherwise, Subcontractor shall:

- a) Discontinue Work on the date and to the extent specified in the notice;
- b) Place no further subcontracts or purchase orders for materials, equipment, services or facilities, except as may be necessary for completion of such portion of Work that is not terminated;
- c) Promptly make every effort to cancel, with terms satisfactory to HOUSTON WATERWORKS TEAM, all of its subcontracts and purchase orders to the extent they relate to the performance of terminated Work; and
- d) Perform only such Work as may be necessary to preserve and protect Work in progress and to protect materials and equipment in transit, at the Site, or at other locations where Work is being performed.

11.2 Termination of the Prime Contract

If the Prime Contract is terminated, this Subcontract may be likewise terminated for convenience in accordance with the provisions of Article 11.1.

11.3 Subcontractor's Remedies

If this Subcontract is terminated by HOUSTON WATERWORKS TEAM for convenience in accordance with the preceding sections, Subcontractor shall be paid for Work performed prior to the date of such termination plus Subcontractor's reasonable and mutually agreed demobilization costs and costs reasonably incurred in terminating its subcontracts and purchase orders for the terminated Work, and a reasonable allowance for Subcontractor's overhead and profit for completed Work calculated according to the compensation provisions of this Subcontract. Such costs shall not include any lost anticipated profit. Recovery of such costs shall be Subcontractor's exclusive remedy for a termination for convenience.

11.4 Termination of Subcontractor for Cause

If Subcontractor is adjudged bankrupt, or if it makes a general assignment for the benefit of its creditors, or if a receiver is appointed on account of its insolvency, or if it fails to supply enough properly skilled workmen or proper materials, or if it fails to make proper payment to its subcontractors or for materials or labor, or persistently disregards Applicable Law, or breaches a provision of this Subcontract, then without prejudice to any right or remedy and after giving Subcontractor seven (7) days written notice, during which period Subcontractor fails to cure the violation, HOUSTON WATERWORKS TEAM may, at its option, take any or all of the following actions; declare the Subcontractor in default, terminate this Subcontract, take possession of the Site and of all materials, equipment, tools, construction equipment, and machinery thereon owned by Subcontractor and/or finish the Work by whatever reasonable method it may deem expedient. HOUSTON WATERWORKS TEAM shall be the assignee of and have a security interest in the property described above to the extent located on the Site and shall be the assignee of any subcontracts between Subcontractor and any of its Lower Tier Subcontractors and HOUSTON WATERWORKS TEAM may at any time file this Subcontract as a financing statement under Applicable Law. Subcontractor shall be entitled to recover progress payments for Work performed prior to the date default was declared pursuant to this Section less (i) the costs incurred by HOUSTON WATERWORKS TEAM to complete Subcontractor's Work (including the costs of any replacement contractor and an allowance for administrative burden and (ii) any other costs (including attorney costs) incurred by HOUSTON WATERWORKS TEAM as a result of the Subcontractor's default. If the costs to complete Subcontractor's Work and the other costs incurred by HOUSTON WATERWORKS TEAM exceed the balance due to Subcontractor, Subcontractor shall promptly pay HOUSTON WATERWORKS TEAM such excess amount. Subcontractor shall not be entitled to receive any further payment for previously completed Work until the Project is finally completed.

11.5 Suspension of the Work

At any time and without cause, HOUSTON WATERWORKS TEAM may suspend the Work or any portion thereof by twenty-four (24) hour notice in writing to Subcontractor. Subcontractor shall resume the Work on the date so fixed. Subcontractor shall continue to perform all Work that is not suspended. Subcontractor shall, where appropriate, be allowed an adjustment in the Subcontract Price or an extension of the Subcontract times, or both as provided in Article 7, but only if the suspension was not caused by an act or omission of Subcontractor, its Lower Tier Subcontractors or suppliers.

Should Owner suspend its Prime Contract with HOUSTON WATERWORKS TEAM or any part that includes Subcontractor's Work, HOUSTON WATERWORKS TEAM shall notify Subcontractor in writing and upon receiving notification Subcontractor shall immediately suspend the Work. **If the cause of the Owner's suspension is a negligent act or omission of Subcontractor then HOUSTON WATERWORKS TEAM's liability to Subcontractor shall be limited to the extent of HOUSTON WATERWORKS TEAM's recovery from the Owner on Subcontractor's behalf. If the cause of the Owner's suspension is not a negligent act or omission of Subcontractor, Subcontractor shall be allowed an adjustment in the Subcontract Price or an extension of the Subcontract times, or both. Such adjustment will be submitted to HWT and be subject to review and approval.** Subcontractor shall resume the suspended Work immediately upon receipt of written notice from HOUSTON WATERWORKS TEAM to resume.

11.6 Survival

The rights, duties and obligations of the parties hereto for confidentiality, warranty, and indemnification, including without limitation Articles 2, 4, 5, 8, 9, and 12, and any related Special Conditions shall survive termination of this Subcontract.

12.0 Article 12 – Dispute Resolution

12.1 Dispute Resolution

If any controversy or claim arises out of or relates to this Subcontract, or breach thereof, the parties agree to use the dispute resolution procedure set herein. Subcontractor shall provide all reasonable assistance to HOUSTON WATERWORKS TEAM relating to any dispute between Owner and HOUSTON WATERWORKS TEAM and shall be bound by any determination made in such dispute resolution proceedings between Owner and HOUSTON WATERWORKS TEAM that effect Subcontractor's rights.

12.2 Direct Negotiation

The parties shall initially attempt to resolve the dispute by direct negotiation in an amicable manner at the Project level. If a resolution is not reached at the Project level, Senior Managers designated by the Subcontractor and HOUSTON WATERWORKS TEAM shall attempt to resolve the dispute.

12.3 Arbitration or Litigation

If the Senior Managers cannot settle the dispute by direct negotiation within sixty (60) days from the commencement of direct negotiation, HOUSTON WATERWORKS TEAM may, in its sole discretion, choose to proceed to arbitration in accordance with the Construction Industry Arbitration Rules of the American Arbitration Association then in effect or to litigate the matter in a court of competent jurisdiction. Arbitration proceeding shall be held in the county and state where the Project is located.

12.4 Notice for Arbitration

If HOUSTON WATERWORKS TEAM elects to proceed with arbitration in lieu of litigation, notice of arbitration shall be filed in writing with the Subcontractor and with the American Arbitration Association.

12.5 Discovery Before Arbitration

Prior to any arbitration hearing, discovery shall be limited to: interrogatories; requests for production of documents, exchange of written reports prepared by expert witnesses retained by any party to the proceeding, depositions of such expert witnesses; and depositions of no more than ten (10) witnesses by each party. The parties shall be entitled to take such discovery from third (3rd) parties as agreed to or as ordered or approved by the arbitrator(s).

12.6 Judgment

Judgment upon the award rendered by the arbitrators shall be final and may be entered in any court having lawful jurisdiction thereof.

12.7 Performance Pending Resolution of Dispute

Unless otherwise agreed in writing, Subcontractor shall continue its Work and maintain its progress during any dispute resolution proceedings, and HOUSTON WATERWORKS TEAM shall continue to make payments to the Subcontractor in accord with this Subcontract. If Subcontractor fails to continue or fails to perform its Work fully, HOUSTON WATERWORKS TEAM reserves the right on five (5) calendar days written notice to arrange for others to perform the remaining portion of the Work and deduct the cost of performing the Work from amounts due or to become due to Subcontractor.

12.8 Cost of Dispute Resolution

The prevailing party in any dispute arising out of or relating to this Subcontract or its breach that is resolved by arbitration or litigation shall be entitled to recover from the other party reasonable attorney's fees, costs and expenses incurred by the prevailing party in connection with such arbitration or litigation in the same proportion as the final amount recovered bears to the initial request of the party seeking recovery.

13.0 Article 13 – Miscellaneous Provisions

13.1 Assignment

Subcontractor shall not assign its interest in this Subcontract without the prior written consent of HOUSTON WATERWORKS TEAM. The consent of HOUSTON WATERWORKS TEAM or lack thereof shall not in any manner alter, reduce or modify Subcontractor's obligations under this Subcontract. Subcontractor does, however, assign to HOUSTON WATERWORKS TEAM any and all of its lower tier subcontracts and purchase orders related to Work contingent only on (i) the termination of this Subcontract and (ii) HOUSTON WATERWORKS TEAM, in its sole discretion, accepting such assignment within thirty (30) days after such termination.

HOUSTON WATERWORKS TEAM reserves the right to assign this Subcontract in whole or in part with the consent of Subcontractor **which consent will not be unreasonably withheld.**

Without prejudice to any other rights or remedies in this Subcontract, HOUSTON WATERWORKS TEAM may, **with Subcontractor's consent**, assign any agreements it may have with others, including and without limitation, those for engineered equipment, to the Subcontractor. Subcontractor shall accept such assignment and execute the obligations imposed by any such agreement.

HOUSTON WATERWORKS TEAM's contingent assignment of this Subcontract to Owner, if provided in the Prime Contract, is effective when Owner has terminated the Prime Contract for cause and has accepted the assignment by notifying Subcontractor in writing. This contingent assignment is subject to the prior rights of a surety that may be obligated under HOUSTON WATERWORKS TEAM's bond, if any.

Subcontractor shall provide HOUSTON WATERWORKS TEAM thirty days prior written notice of its intent to enter into any agreement to assign its payments due under this Subcontract to others (Factoring Agreement). Where Subcontractor enters into a Factoring Agreement and chooses not to assign HOUSTON WATERWORKS TEAM invoices Subcontractor shall issue a letter to HOUSTON WATERWORKS TEAM signed by both Subcontractor and the other party(s) to the Factoring Agreement to the effect that any existing agreement of assignment/factoring shall not apply to any payments made against this Subcontract.

Factoring Agreements made by Subcontractor may cause HOUSTON WATERWORKS TEAM to incur additional cost under this Subcontract. Subcontractor, therefore, agrees to indemnify HOUSTON WATERWORKS TEAM and Owner against any and all charges incurred due to Subcontractor's failure to pre-notify and provide the following information as applicable.

- a) An agreement letter issued to HOUSTON WATERWORKS TEAM signed by both Subcontractor and factoring institution stating payment can be remitted in a two (2) party check arrangement pertaining to any payments made against this Subcontract. The letter shall state that lien release provisions of this Subcontract remain in full force and effect and that the Back-Charge Provisions as stated in this Subcontract remain in full force and effect.
- b) Identification of factoring institution and remit to instructions
- c) Partial, or, Final Release of Lien Statements, as applicable, are required from suppliers and Lower Tier Subcontractors and Subcontractor with each invoice with factoring provisions.

13.2 Choice of Law

This Subcontract shall be governed by the laws of the state where the Project is located without regard to choice of law rules unless a different state law applies under the Prime Contract in which case the law set forth in the Prime Contract shall apply.

13.3 Confidential Information

All information disclosed to Subcontractor by HOUSTON WATERWORKS TEAM or Owner or acquired by Subcontractor in connection with the performance of the Work shall be held in confidence by Subcontractor and shall not be disclosed to third parties without HOUSTON WATERWORKS TEAM's prior written consent unless Subcontractor can show to HOUSTON WATERWORKS TEAM's satisfaction that said information (i) is generally known to the public without breach hereof, (ii) was known to Subcontractor or in its possession prior to disclosure by HOUSTON WATERWORKS TEAM, (iii) was disclosed to Subcontractor, after disclosure by HOUSTON WATERWORKS TEAM, by a third party having the unrestricted legal rights to disclose the same, or (iv) is required by law to be disclosed.

If a Confidentiality and Nondisclosure Agreement is made a part of the Subcontract Documents Subcontractor shall comply with the provisions thereof, whether or not such agreement has been executed, and shall ensure that its employees and Sub-subcontractors also comply with such provisions.

13.4 Ownership of Documents

All documents prepared by Subcontractor, including but not limited to sketches, drawings, plans, specifications, models, calculations, computer software, and electronic media are instruments of service for the Project and are the property of HOUSTON WATERWORKS TEAM unless directed otherwise. If Owner requires, they shall be transferred to its custody at completion of the Work, and shall not be used for purposes other than maintenance, repairs, or reference without permission of Subcontractor. Subcontractor reserves the right to retain reproducible media of all documents.

13.5 Electronic Signature and Documents

The governing documents applicable to this Subcontract are the printed documents. HOUSTON WATERWORKS TEAM may provide electronic versions all or of certain documents. By accepting the electronic files, Subcontractor agrees:

- (i) HOUSTON WATERWORKS TEAM does not warrant the files to be complete without defect or inaccuracy or virus free. To the extent that the electronic files differ from the printed documents, any conclusions or information gained from the electronic files are at Subcontractor's own risk and no claims shall be made against HOUSTON WATERWORKS TEAM or Owner regarding the electronic files.

- (ii) All information disclosed by HOUSTON WATERWORKS TEAM or Owner in electronic files is subject to the confidential information requirements of this Subcontract.
- iii) Delivery of electronic files does not relieve a Subcontractor of responsibility to maintain and provide current records and information throughout the course of the Work.

13.6 Waiver

The failure of either party to enforce any of the provisions of this Subcontract at any time, or from time to time, shall not operate as a waiver with respect to future or other actions or claims.

13.7 Effect of Agreement

The rights and obligations of the parties under this Subcontract are binding upon and shall inure to the benefit of the parties, their successors and assigns.

13.8 Notices

All notices, requests, demands, and other communications under this Subcontract are deemed given if delivered in person or if mailed in the United States mail, certified mail, postage prepaid, return receipt requested, and properly addressed as set forth on the page two (2) of the Subcontract Agreement. If mailed, any such notice, request, demand, or other communication is effective on the date shown on the return receipt. Facsimile or email transmission may also be used, provided that they are also mailed, in which case the effective date shall be the date of the transmission delivery confirmation. From time to time either party may designate another person or address for all purposes of the Subcontract by giving to the other party not less than fifteen (15) days advance written notice of such change of person or address in accord with the provisions hereof.

13.9 Invalidity

If any of the provisions of this Subcontract shall contravene or be invalid under the laws of the jurisdiction where the Subcontract or the Work is to be performed, such contravention or invalidity shall not invalidate the whole Subcontract or any other provision thereof, but the contravening or invalid provision or portion of such provision shall be deemed amended to conform with the Applicable Law but in such a manner as to most nearly reflect the intent of the parties.

13.10 Joint Responsibility for Drafting

This Subcontract was negotiated and prepared by both parties. The parties have agreed to the wording of this Subcontract; and none of the provisions hereof shall be construed against one party on the ground that such party is the author of this Subcontract or any part hereof.

13.11 Compliance with Laws

Subcontractor agrees to be bound by, and at its own cost to comply with all Applicable Laws. Subcontractor shall be liable to HOUSTON WATERWORKS TEAM and Owner for all loss, cost and expense attributable to any acts or commission or omission by Subcontractor, its employees, its Lower Tier Subcontractors, suppliers and agents resulting from the failure to comply with Applicable Laws, including but not limited to, any fines, penalties or corrective measures.

13.12 Publicity

Subcontractor shall not disclose the nature of Subcontractor's Work on the Project or engage in any other publicity or public media disclosures with respect to the Project without the prior written consent of HOUSTON WATERWORKS TEAM.

13.13 Titles and Terms

The titles given to the Articles of this Subcontract are for ease of reference only and shall not be relied upon or cited for any other purpose. Any terms which have well-known technical or trade meanings, unless otherwise specifically defined in the Subcontract, shall be interpreted in accordance with such well-known meanings.

13.14 Sustainability

HOUSTON WATERWORKS TEAM encourages the use of sustainable environmental, social, and economic concepts and solutions to meet the requirements of this Subcontract, while preserving or enhancing the natural environment, reducing costs, and contributing to the well-being of the community over the long term. HOUSTON WATERWORKS TEAM and Subcontractor shall consider as possible and applicable to the Work, the prudent use of the following sustainability concepts and solutions; (i) plans to address Sustainability Management, Health and Safety, Construction Traffic, Site Smoking; (ii) use of a Sustainable Construction Log during administration and planning; (iii) Ground Water Remediation; (iv) Reduction of Fresh Water Usage in Water Management; (v) Soil Stockpile Management, Dust Control, Soil Productivity Management, Designated Refueling Areas, Onsite Mulching of Vegetative Debris; (vi) Efficient Usage of Equipment, Lighting Optimization, Construction Office Energy Use, Crane Energy Usage, Efficient Commissioning and Renewable Energy when considering Energy Consumption and Emissions; (vii) Waste Management and Efficient Materials Usage when considering Materials and Resources. Subcontractor shall support HOUSTON WATERWORKS TEAM by providing documentation of such actions if so requested.

13.15 Supply Chain Ethics

The Subcontractor shall comply with the most current version of the HOUSTON WATERWORKS TEAM Supply Chain Ethics and Business Conduct Principles which are hereby incorporated into this Subcontract and available upon request.

END OF GENERAL TERMS AND CONDITIONS

Attachment GC-1 – Performance Bond

KNOW ALL MEN BY THESE PRESENTS: _____
(Subcontractor's full name and address)

as Principal, hereinafter called Subcontractor, and _____
(Surety's full name and address)

as Surety, hereinafter called Surety, are held and firmly bound unto
HOUSTON WATERWORKS TEAM, located at 12630 Water Works Blvd., Humble, Texas 77396

as Obligee, hereinafter called HOUSTON WATERWORKS TEAM, in the amount of
_____ Dollars (\$ _____)

for payment, whereof Subcontractor and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS,

Subcontractor has by written agreement dated _____, 20____, entered into a Subcontract with the HOUSTON WATERWORKS TEA for the Northeast Purification Plant Expansion Project located at 12630 Water Works Way, Humble, Texas 77396 which Subcontract is by reference made a part hereof, and is hereinafter referred to as the Subcontract.

THEREFORE, THE CONDITION OF THIS OBLIGATION is such that, if Subcontractor shall promptly and faithfully perform said Subcontract, then this obligation shall be null and void; otherwise it shall remain in full force and effect.

The Surety hereby waives notice of any alteration or extension of time made by the HOUSTON WATERWORKS TEAM.

Whenever Subcontractor shall be, and declared by HOUSTON WATERWORKS TEAM to be in default under the Subcontract, HOUSTON WATERWORKS TEAM having performed its obligations thereunder, the Surety shall promptly,

Remedy the default,

Complete the Subcontract in accordance with its terms and conditions, or

Obtain a bid or bids for completing the Subcontract in accordance with its terms and conditions, and upon determination by Surety of the lowest responsible bidder, or, if HOUSTON WATERWORKS TEAM elects, upon determination by the HOUSTON WATERWORKS TEAM and the Surety jointly of the lowest responsible Bidder, arrange for a subcontract between such Bidder and HOUSTON WATERWORKS TEAM, and make available as Work progresses (even though there should be a default or a succession of defaults under the Subcontract or Subcontracts of completion arranged under this paragraph) sufficient funds to pay the cost of completion less the balance of the Subcontract Price; but not exceeding, including other costs and damages for which the Surety may be liable hereunder, the amount set forth in the first paragraph hereof. The term "balance of the Subcontract Price," as used in this paragraph, shall mean the total amount payable by HOUSTON WATERWORKS TEAM to Subcontractor under the Subcontract and any amendments thereto, less the amount properly paid by HOUSTON WATERWORKS TEAM to Subcontractor.

Subcontract No.: 697582-4010
Subcontract Title: EWP4 – 108in Transmission Mains



Any suit under this bond must be instituted before the expiration of 2 years from the date on which final payment under the Subcontract falls due.

No right of action shall accrue on this bond to or for the use of any person or corporation other than HOUSTON WATERWORKS TEAM named herein or the heirs, executors, administrators or successors of the HOUSTON WATERWORKS TEAM.

by,

Signed and sealed this _____ day of _____ 20____

(Witness)

(Subcontractor) (LS)

(Title)

(Witness)

(Surety) (LS)

(Title)

Attachment GC-2 – Payment Bond

THIS BOND IS ISSUED SIMULTANEOUSLY WITH A PERFORMANCE BOND IN FAVOR OF THE HOUSTON WATERWORKS TEAM CONDITIONED ON THE FULL AND FAITHFUL PERFORMANCE OF THE SUBCONTRACT

KNOW ALL MEN BY THESE PRESENTS: that _____
(Subcontractor's full name and address)

as Principal, hereinafter called Subcontractor, and, _____
(Surety's full name and address)

as Surety, hereinafter called Surety, are held and firmly bound unto the HOUSTON WATERWORKS TEAM located at 12630 Water Works Blvd., Humble, Texas 77396

as Obligee, hereinafter called HOUSTON WATERWORKS TEAM, for the use and benefit of claimants as hereinbelow defined, in

the amount of _____ Dollars (\$ _____)

for payment, whereof Subcontractor and Surety bind themselves, their heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents.

WHEREAS,

Subcontractor has by written agreement dated _____ 20____, entered into a Subcontract with the HOUSTON WATERWORKS TEAM for the Northeast Purification Plant Expansion Project located at 12630 Water Works Way, Humble, Texas 77396 which Subcontract is by reference made a part hereof, and is hereinafter referred to as the Subcontract.

THEREFORE, THE CONDITION OF THIS OBLIGATION is such that, if Subcontractor shall promptly make payment to all claimants as hereinafter defined, for all labor and material used or reasonably required for use in the performance of the Subcontract, then this obligation shall be void; otherwise it shall remain in full force and effect, subject, however, to the following conditions:

1. A claimant is defined as having a direct contract with the Subcontractor or with a Sub-subcontractor of any tier for labor, material, or both, used or reasonably required for use in the performance of the Subcontract, labor and material being construed to include that part of water, gas, power, light, heat, oil, gasoline, telephone service, or rental of equipment directly applicable to the Subcontract.
2. The above named Subcontractor and Surety hereby jointly and severally agree with the HOUSTON WATERWORKS TEAM that every claimant as herein defined, who has not been paid in full before the expiration of a period of 90 days after the date on which the last of such claimant's work or labor was done or performed, or materials were furnished by such claimant, may sue on this bond for the use of such claimant, prosecute the suit to final judgment for such sum or sums as may be justly due claimant, and have execution thereon. HOUSTON WATERWORKS TEAM shall not be liable for the payment of any costs or expenses of any such suit.
3. No suit or action shall be commenced hereunder by any claimant:

- a) Unless claimant, other than one having a direct contract with the Subcontractor, shall have given written notice to any two of the following: the Subcontractor, HOUSTON WATERWORKS TEAM, or the Surety above named, within 90 days after such claimant did or performed the last of the work or labor, or furnished the last of the materials for which said claim is made, stating with substantial accuracy the amount claimed and the name of the party to whom the materials were furnished, or for whom the work or labor was done or performed. Such notice shall be served by mailing the same by registered mail or certified mail; postage prepaid, in an envelope addressed to Subcontractor, HOUSTON WATERWORKS TEAM or Surety, at any place where an office is regularly maintained for the transaction of business, or served in any manner in which legal process may be served in the state in which the aforesaid Project is located, save that such service need not be made by a public officer.
- b) After the expiration of 1 year following the date on which Subcontractor ceased Work on said Subcontract, it being understood, however, that if any limitation embodied in this bond is prohibited by any Applicable Law controlling the construction hereof such limitation shall be deemed to be amended so as to be equal to the minimum period of limitation permitted by such Applicable Law.
- c) Other than in a state court of competent jurisdiction in and for the county or other political subdivision of the state in which the Project, or any part thereof, is situated, or in the United States District Court for the district in which the Project, or any part thereof is situated, and not elsewhere.
4. The amount of this bond shall be reduced by and to the extent of any payment or payments made in good faith hereunder, inclusive of the payment by Surety of mechanics' liens which may be filed of record against said improvement, whether or not claim for the amount of such lien be presented under and against this Bond.

Signed and sealed this _____ day of _____ 20(____))

(Witness)

(Subcontractor) (LS)

(Title)

(Witness)

(Surety) (LS)

(Title)

3.0 SPECIAL CONDITIONS

The following Special Conditions specify requirements from that HOUSTON WATERWORKS TEAM are bound to under its Prime Contract with the Owner and obligated, under that contract, to flow down to all participants in the Project. It is the responsibility of the Subcontractor to acquaint its employees, and, contract with its Lower Tier Subcontractors and Suppliers in accordance with requirements of this Subcontract including the provisions contained in these Special Conditions. Document precedence is as described in the Subcontract Agreement. In the event of a conflict between these provisions and those stated elsewhere in this Subcontract, the more stringent shall apply.

1.0 Article 1 - Interpretation

This Service Contract shall be interpreted according to the following provisions, except to the extent the context or the express provisions of this Service Contract otherwise require.

1.1 Houston Waterworks Team

or, HWT or, the Joint Venture means a Joint Venture between CH2M HILL Engineers, Inc. and CDM Constructors, Inc., the Design-Builder for the Northeast Water Purification Plant Expansion Project for the City of Houston, Texas

1.2 Plurality

Words importing the singular number mean and include the plural number and vice versa

1.3 Persons

Words importing persons include individuals, legal personal representatives, firms, companies, associations, joint ventures, general partnerships, limited partnerships, limited liability partnerships, limited liability companies, trusts, business trusts, corporations, governmental bodies, and other legal entities.

1.4 Headings

The table of contents and any headings preceding the text of the Articles, Sections and subsections of this Subcontract shall be solely for convenience of reference and shall not affect its meaning, construction or effect.

1.5 References Hereto

The terms “hereby,” “hereof,” “herein,” “hereunder” and any similar terms refer to this Subcontract.

1.6 References to Days and Times of Days

All references to days herein are references to calendar days, unless otherwise indicated, such as by reference to Business Days. Each reference to time of day is a reference to **Central** Standard Time or **Central** Daylight-Savings time, as the case may be.

1.7 References to Including

The words “include, includes and including” are to be construed as meaning “include without limitation” and “including without limitation”, respectively

1.8 References to Statutes

Each reference to a statute or statutory provision includes any statute or statutory provision which amends, extends, consolidates or replaces the statute or statutory provision or which has been amended, extended, consolidated or replaced by the statute or statutory provision and includes any orders, regulations, by-laws, ordinances, codes of practice or instruments made under the relevant statute.

1.9 References to Governmental Bodies

Each reference to a Governmental Body is deemed to include a reference to any successor to such Governmental Body or any organization or entity or organizations or

entities which has or have taken over the functions or responsibilities of such Governmental Body.

1.10 References to Business Days

If the time for doing an act falls or expires on a day that is not a Business Day, the time for doing such act shall be extended to the next Business Day.

1.11 References to Documents and Standards

Each reference to an agreement, document, standard, principle or other instrument includes a reference to that agreement, document, standard, principle or instrument as amended, supplemented, substituted, notated or assigned.

1.12 References to All Reasonable Efforts

The expression "all reasonable efforts" and expressions of like import, when used in connection with an obligation of either party, means taking in good faith and with due diligence all reasonable steps to achieve the objective and to perform the obligation, including doing all that can reasonably be done in the circumstances taking into account each party's obligations hereunder to mitigate delays and additional costs to the other party, and in any event taking no less steps and efforts than those that would be taken by a reasonable and prudent person in comparable circumstances but where the whole of the benefit of the obligation and where all the results of taking such steps and efforts accrued solely to that person's own benefit.

1.13 Entire Subcontract

This Subcontract contains the entire agreement between the parties hereto with respect to the transactions contemplated by this Subcontract. Without limiting the generality of the foregoing, this Subcontract shall completely and fully supersede all other understandings and agreements among the parties with respect to such transactions.

1.14 Counterparts

This Subcontract may be executed in any number of original counterparts. All such counterparts shall constitute but one and the same Subcontract.

1.15 Governing Law

This Subcontract shall be governed by and construed in accordance with the applicable laws of the State of Texas. Venue for litigation shall be located in Harris County, Texas.

1.16 Severability

Each provision of this Subcontract shall be valid and enforceable to the fullest extent permitted by law. If any provision of this Subcontract is held to be invalid, unenforceable or illegal to any extent, such provision be severed and such invalidity, unenforceability or illegality shall not prejudice or affect the validity, enforceability and legality of the remaining provisions of this Subcontract. If any such provision of this Subcontract is held to be invalid, unenforceable, or illegal, the parties will promptly endeavor in good faith to negotiate new provisions to eliminate such invalidity, unenforceability or illegality and to restore this Subcontract as nearly as possible to its original intent and effect.

1.17 Drafting Responsibilities

The parties waive the application of any rule of law which otherwise would be applicable in connection with the construction of this Subcontract to the effect that ambiguous or conflicting terms or provisions should be construed against the party who (or whose counsel) prepared the executed agreement or any earlier draft of the same.

1.18 Interpolation

If any calculation hereunder is to be made by reference to a chart or table of values, and the reference calculation falls between two stated values, the calculation shall be made on the basis of linear interpolation

1.19 Accounting and Financial Terms

All accounting and financial terms used herein are, unless otherwise indicated, to be interpreted and applied in accordance with GAAP.

1.20 Delivery of Documents in Digital Format

In this Agreement, the Subcontractor is obligated to deliver reports, records, designs, plans, drawings, specifications, proposals, and other documentary submittals in connection with the performance of its duties hereunder. The Subcontractor agrees that all such documents shall be submitted to the Houston Water Works Team both in printed form (in the number of copies indicated) and, at the Houston Water Works Team's request, in digital form. Digital copies shall consist of computer readable data submitted in any standard interchange format which the Houston Water Works Team may reasonably request to facilitate the administration and enforcement of this Agreement. In the event that a conflict exists between the signed or the signed and stamped hard copy of any document and the digital copy thereof, the signed or the signed and stamped hard copy shall govern.

1.21 Obligations to Provide Assistance

The obligations of a party to cooperate with, to assist or to provide assistance to the other party hereunder shall be construed as an obligation to use the party's personnel resources to the extent reasonably available in the context of performance of their normal duties, and not to incur material additional overtime or third-party expense unless requested and reimbursed by the assisted party. Any failure of a party entitled to assistance hereunder to perform an obligation under this Subcontract shall not be excused on account of any failure of the party obligated to provide assistance.

1.22 Third-Party Rights

This Subcontract is exclusively for the benefit of HWT and the Subcontractor and shall not provide any third parties (with the sole exceptions of the rights of any third-party HWT or Owner Indemnitees as provided in this Subcontract with any remedy, claim, liability, reimbursement, cause of action or other rights).

1.23 Discretion

When a party has "discretion", it means that party has the sole, absolute and unfettered discretion, with no requirement to act reasonably or provide reasons unless specifically required under the provisions of this Subcontract.

1.24 City

City means the City of Houston, a home rule municipality located principally within Harris County, Texas, including its successors and its authorized representatives.

1.25 Design-Builder

Design-Builder means Houston Waterworks Team, a joint venture organized and existing under the laws of the State of Texas, and its permitted successors and assigns. Each reference to Design-Builder in the Subcontract Documents shall mean and include each Joint Venture Member, both individually and collectively.

1.26 Liquidated Damages

This Subcontract provides for the payment by the Subcontractor of liquidated damages in certain circumstances. The parties agree that HWT's actual damages in each such circumstance would be difficult or impossible to ascertain, and that the liquidated damages provided for herein with respect to each such circumstance are intended to place HWT in the same economic position as it would have been in had the circumstance not occurred. Except where additional remedies are otherwise specifically provided for herein, such liquidated damages shall constitute the only damages payable by the Subcontractor to HWT in such circumstances of non-performance, breach or default,

regardless of legal theory. The parties acknowledge and agree that the additional remedies specifically provided for in this Subcontract are intended to address harms and damages which are separate and distinct from those which the liquidated damages are meant to remedy. Liquidated Damages can be assessed by HWT should the Subcontractor not be substantially complete with the Work on or before the Substantial Completion Milestone Date as defined in Exhibit D: Schedule, Attachment D1: Subcontractor Schedule Of Milestones Dates. In the event that Substantial Completion occurs subsequent to the scheduled milestone date, the Subcontractor shall pay to HWT daily delay liquidated damages in accordance with this subsection for each day that the Substantial Completion Date falls after the Milestone Substantial Completion Date, up to any termination of this Subcontract for an Event of Default. The amount of such daily delay liquidated damages payable shall be \$3,800 per day, for each day of delay occurring 30 days after 30 after the Milestone Substantial Completion Date (November 20, 2019) until December 20, 2019 and \$10,000 per day, for each day of delay occurring on and after December 20, 2019. Such damages shall be payable on the first day of each month and, upon any termination for failure to achieve Substantial Completion, upon the date of termination.

1.27 Standards of Workmanship and Materials

Any reference in this Subcontract to materials, equipment, systems or supplies (whether such references are in lists, notes, specifications, schedules, or otherwise) shall be construed to require the Subcontractor to furnish the same in accordance with the grades and standards therefor indicated in this Subcontract. Where this Subcontract does not specify any explicit quality or standard for construction materials or workmanship, the Subcontractor shall use only workmanship and new materials of a quality consistent with that of construction workmanship and materials specified elsewhere in the Technical Specifications, and the Technical Specifications are to be interpreted accordingly.

1.28 Technical Standards and Codes

References in this Subcontract to all professional and technical standards, codes and specifications are to the most recently published professional and technical standards, codes and specifications of the institute, organization, association, authority or society specified, all as in effect as of the Contract Date. Unless otherwise specified to the contrary, (1) all such professional and technical standards, codes and specifications shall apply as if incorporated in the Technical Specifications and (2) if any material revision occurs, to the Subcontractor's knowledge, after the Contract Date, and prior to completion of the applicable Design-Build Work, the Subcontractor shall notify HWT. If so directed by HWT, the Subcontractor shall perform the applicable Design-Build Work in accordance with the revised professional and technical standard, code, or specification as long as the Subcontractor is compensated, on a lump sum or Cost Substantiated basis, for any additional cost or expense attributable to any such revision.

1.29 Good Industry Practice and Good Engineering and Construction Practice

Good Industry Practice and Good Engineering and Construction Practice shall be utilized hereunder, among other things, to implement and in no event to displace or lessen the stringency of, the Contract Standards. In the event that, over the course of the Term, Good Industry Practice or Good Engineering and Construction Practice evolves in a manner which in the aggregate materially and adversely affects the cost of compliance therewith by the Subcontractor, the Subcontractor shall be relieved of its obligation to comply with such evolved Good Industry Practice and Good Engineering and Construction Practice (but not Good Industry Practice and Good Engineering and Construction Practice as of the Contract Date) unless HWT agrees to adjust the Base Design-Build Price or the Service Fee on a lump sum or Cost- Substantiated basis, as appropriate, to account for such additional costs. Except to the extent that the Subcontractor is relieved of its obligation to comply with such evolved Good Industry

Practice or Good Engineering and Construction Practice, as provided above, in no event shall any evolution of Good Industry Practice or Good Engineering and Construction Practice, or any Agency election to pay or not pay any such additional costs, relieve the Subcontractor of its obligations hereunder.

1.30 Applicability, Stringency and Consistency of Contract Standards

Where more than one Contract Standard applies to any particular performance obligation of the Subcontractor hereunder, each such applicable Contract Standard shall be complied with. In the event there are different levels of stringency among such applicable Contract Standards, the most stringent of the applicable Contract Standards shall govern. Any reference in this Subcontract to materials, equipment, systems or supplies (whether such references are in lists, notes, specifications, schedules, or otherwise) shall be construed to require the Subcontractor to furnish the same, at minimum, in accordance with the grades and standards therefor indicated in this Subcontract.

1.31 Defined Term

The definitions set forth herein shall control in the event of any conflict with any definitions used in the recitals hereto.

2.0 Article 2 – Permitting, Design and Construction of the Project

2.1 Design-Work Build Generally

2.1.1 The Subcontractor and any Lower Tier Subcontractor that performs any construction portion of the Design-Build Work shall possess and maintain a State contractor's license,

classification A (General Engineering Contractor).

2.1.2 Labor and Wage Requirements. The Subcontractor shall comply with all requirements set forth in Exhibit P with respect to the employment of labor in the performance of the Design-Build Work. In particular, the Subcontractor shall comply with the prevailing wage and other requirements specified.

2.2 Compliance with Applicable Law

2.3.1 Registration, Licensing and Certification Requirements. The Subcontractor shall ensure that all persons performing Design-Build Work, including all Subcontractors, comply with all registration, licensing and certification requirements imposed by any Governmental Body.

2.3.2 Compliance with Conditions in Governmental Approvals. The Subcontractor shall comply

with all conditions and requirements of all Design-Build Governmental Approvals required to be made, obtained or maintained under Applicable Law in connection with the continuance of the Design-Build Work

2.3 Personnel

2.3.1 Personnel Performance. The Subcontractor shall enforce discipline and good order at all times among the Subcontractor's employees and all Subcontractors. All persons engaged by the Subcontractor for Design-Build Work shall have requisite skills for the tasks assigned. The Subcontractor shall employ or engage and compensate engineers and other consultants to perform all engineering and other services required for the Design-Build Work. All firms and personnel performing Design-Build Work, including Lower Tier Subcontractor firms and personnel, shall meet the licensing and certification requirements imposed by Applicable Law. The Subcontractor shall replace any Subcontractor or Lower Tier Subcontractor employee at the request of HWT, after notice and a reasonable opportunity for corrective action, in the event HWT determines,

in its discretion, that such employee does not have the requisite skills for the tasks assigned or has engaged in unlawful, unruly or objectionable conduct.

3.0 Article 3 – Financing the Project and Payment of the Design-Build Price

3.1 Financing

- 3.1.1 Funding for the Project is expected to be provided in part by the Texas Water Development Board (TWDB). Neither the State of Texas, nor any of its departments, agencies or employees, is, or will be, a party to this Agreement or any Lower Tier Subcontract. This Agreement is subject to applicable provisions of 31 TAC Chapter 363 in effect on the date of assistance award for this Project. TWDB shall, at all times have access to and be permitted to observe and review all work, materials, equipment, payrolls, personnel records, employment conditions, material invoices, and other relevant data and records pertaining to this Agreement; provided, however that all instructions and approval with respect to the work will be given to the Subcontractor only by the Houston Water Works Team in accordance with this Agreement. Any such inspection or review by the TWDB shall not subject the State of Texas to any action for damages. Without limiting any other indemnification obligation hereunder, Subcontractor shall indemnify and save harmless TWDB and its representatives against any claim arising from violation of any Applicable Law by any Lower Tier Subcontractor.

4.0 Article 4 – Insurance, Damage, Uncontrollable Circumstances and Indemnification

4.1 Uncontrollable Circumstances – Entitlement to Relief

- 4.1.1 Relief Available to the Subcontractor. If and to the extent that an Uncontrollable Circumstance interferes with, delays or increases the cost to the Subcontractor performing the Contract Services in accordance herewith, the Subcontractor shall be entitled to either relief from its performance obligations or an increase in the Design-Build Price or the Service Fee (except as and to the extent provided in herein), or any combination thereof, each of which properly reflects the interference with performance, the amount of the increased cost, or the time lost as a result thereof, in each case at the sole option of HWT and only to the minimum extent necessary to compensate the Subcontractor or provide performance relief and only to the extent directly attributable to the Uncontrollable Circumstance. The Subcontractor shall perform all other Work not affected by the Uncontrollable Circumstances. Any cost reduction achieved, or which should have been achieved, through the mitigation measures undertaken by the Subcontractor pursuant to subsection 4.1.2 of this Section upon the occurrence of an Uncontrollable Circumstance shall be reflected in a reduction of the amount by which the Design-Build Price or the Service Fee would have otherwise been increased or shall serve to reduce the Design-Build Price or the Service Fee to reflect such mitigation measures, as applicable. The Subcontractor shall not be entitled to any price relief through an adjustment to the Design-Build Price, the Service Fee or otherwise on account of any costs incurred as the result of an act, event or circumstance that the Subcontractor or the Guarantor is obligated to insure against under the insurance provisions of this Subcontract, irrespective of any limits of coverage and of any deductible applicable under any policy of insurance maintained or required to be maintained thereunder.
- 4.1.2 Mitigation. Whenever an Uncontrollable Circumstance occurs, the Subcontractor shall, as promptly as practicable, use all reasonable efforts to eliminate the cause thereof, reduce costs resulting therefrom, mitigate and limit damage to the parties, and resume or continue full performance under this Subcontract. Any relief to which the Subcontractor is entitled under this Section on account of Uncontrollable Circumstances shall be adjusted to account for the effect of such measures and any

other mitigation measures which were or should have been taken by the Subcontractor in compliance with its duty to mitigate.

4.1.3 Capital Modifications. Before proposing any adjustment to the Subcontract Price in its notice of requested relief hereunder, the Subcontractor shall determine whether any increased costs of operation and maintenance of the Project resulting from an Uncontrollable Circumstance can reasonably and prudently be reduced by undertaking a Capital Modification. In the event that the Subcontractor makes such a determination, the Subcontractor shall so advise HWT in accordance with Notice Provisions herein. HWT shall thereupon determine, in its discretion, whether such a Capital Modification shall be undertaken and shall so advise the Subcontractor within 75 days of receipt of such notice by the Subcontractor. In no event shall the Subcontractor undertake such Capital Modification except at the express written direction of HWT

4.1.4 Applicable Law Compliance. Nothing in this Section shall be interpreted as relieving the Subcontractor of its obligation, following any and all Uncontrollable Circumstances, to perform its obligations under this Subcontract in compliance with Applicable Law.

4.1.5 Construction Schedule Float. The parties acknowledge that the Project completion schedule anticipates early and late finish dates for **Early Work Package 4 Scope of Work under this Subcontract**, and for completion of the Design-Build Work under this Subcontract for Early Work Package 4 prior to the **agreed to Acceptance Date related to Early Work Package 4 Work**. This “float” in schedule shall be owned by **Subcontractor** for any purpose relating to the determination of whether an Uncontrollable Circumstance has occurred or the relief to which the Subcontractor is entitled on account thereof, **subject to the procedures set forth in 4.2 below and the submission and approval of a Change Order Request by HWT**.

4.2 Uncontrollable Circumstances – Claim Procedures

4.2.1 Notice and Written Report. In order to assert an entitlement based on the occurrence of an Uncontrollable Circumstance, the Subcontractor shall give notice of the occurrence of the Uncontrollable Circumstance to HWT as soon as practicable, and in any event within ten days of the date the Subcontractor has knowledge that the Uncontrollable Circumstance has caused or is likely to cause an entitlement to relief under this Subcontract. The Subcontractor’s notice shall include a written report:

- (1) Describing the Uncontrollable Circumstance and the cause thereof, to the extent known;
- (2) Stating the date on which the Uncontrollable Circumstance began and its estimated duration;
- (3) Summarizing the consequences of the Uncontrollable Circumstance and the expected impact on the performance of the Subcontractor’s obligations under this Subcontract; and
- (4) Indicating the nature and scope of the Subcontractor’s potential entitlement to relief.

4.2.2 Updates. The Subcontractor shall provide HWT with periodic updates, together with further details and supporting documentation, as it receives or develops additional information pertaining to the Uncontrollable Circumstance and the matters described in subsection (A) of this Section. In particular, the Subcontractor shall notify HWT as soon as the Uncontrollable Circumstance has ceased and of the time when performance of its affected obligations can be resumed

4.2.3 Submittal of Relief Request. The Subcontractor shall submit to HWT a further notice making its request for specific relief, the basis therefor and the event giving rise to the

requested relief within 30 days after the notice referred to in subsection (A) of this Section. If the specific relief cannot reasonably be ascertained within such 30-day period, the Subcontractor shall furnish such notice within such longer period as necessary to detail the event and ascertain such relief.

- 4.2.4 Delay in Notification. If any Uncontrollable Circumstance notice or any required information is submitted by the Subcontractor to HWT after the dates required under this Section, then the Subcontractor shall be entitled to relief provided due to the occurrence of the Uncontrollable Circumstance except to the extent that the ability to mitigate was adversely affected as a result of the delay in providing such notice or information
- 4.2.5 Multiple and Overlapping Claims. The Subcontractor may make multiple but not duplicative claims with respect to an Uncontrollable Circumstance.
- 4.2.6 Burden of Proof and Mitigation. The Subcontractor shall bear the burden of proof in establishing the occurrence of an Uncontrollable Circumstance and the entitlement to relief based thereon, and shall demonstrate that the Subcontractor complied with its mitigation obligations under subsection 14.3(B) (Mitigation).
- 4.2.7 Resumption of Performance. Promptly following the occurrence of an Uncontrollable Circumstance, the Subcontractor shall use all reasonable efforts to eliminate the cause thereof and resume performance of this Subcontract.
- 4.2.8 Agency Response. Within 30 days after receipt of a relief request by the Subcontractor pursuant to subsection (C) of this Section, HWT shall issue a written determination as to the extent, if any, to which it concurs with the Subcontractor's request, and the reasons therefore.
- 4.2.9 Agreement or Dispute. The agreement of the parties as to the specific relief to be given the Subcontractor on account of an Uncontrollable Circumstance shall be evidenced by a Contract Administration Memorandum or a Subcontract Amendment, as applicable.

4.3 Indemnification by the Company

- 4.3.1 The Subcontractor shall release and defend, indemnify and hold harmless the City and the Authorities to the same extent as the Subcontractor is required to release and defend, indemnify and hold harmless the Houston Water Works Team under this Subcontract. The indemnification procedures with respect to any claim or circumstances that could give rise to an indemnified loss to the Houston Water Works Team, the City or the Authorities shall be as specified herein, with the Houston Water Works Team, the City or Authorities having all rights and responsibilities with respect to any such claim or circumstance as are specified therein for the Houston Water Works Team. The Parties acknowledge and agree that the rights provided under this Article are an express exception to the limitation on any third-party rights under this Subcontract and a material inducement to obtain approval and funding of this Agreement. This Agreement does not create any liability of the Authorities to the Subcontractor and does not create any personal liability on the part of any director, officer, or agent of the Authorities.
- 4.3.2 Subcontractor agrees to and shall release the HOUSTON WATERWORKS TEAM, the city, their agents, employees, officers and legal representatives (collectively the "indemnitees") from all liability for injury, death, damage, or loss to persons or property sustained in connection with or incidental to performance under this agreement, even if the injury, death, damage, or loss is caused by the indemnitees' concurrent (but not sole) negligence and/or the indemnitees' strict product's liability or strict statutory liability.

- 4.3.3 Subcontractor agrees to and shall defend, indemnify, and hold the HOUSTON WATERWORKS TEAM, the city, their agents, employees, officers, and legal representatives (collectively “indemnitees”) harmless for all third-party claims, causes of action, liabilities, fines, and expenses (including, without limitation, attorneys’ fees, court costs, and all other defense costs and interest) for injury, death, damage, or loss to persons or property sustained in connection with or incidental to performance under the contract including, without limitation, those caused by:
1. Subcontractors’ and/or its agents’, employees’, officers’, directors’, contractors’, or subcontractors’ (collectively in numbered paragraphs 1 through 3, “Subcontractor”) breach of this agreement, actual or alleged negligence or intentional acts or omissions;
 2. the indemnitees’ and subcontractor’s actual or alleged concurrent negligence, whether subcontractor is immune from liability or not; and
 3. the indemnitees’ and subcontractor’s actual or alleged concurrent strict products liability, whether subcontractor is immune from liability or not. Subcontractor shall defend, indemnify, and hold the indemnitees harmless during the term of the contract and for four (4) years after the contract terminates, subcontractor shall not indemnify the indemnitees for the indemnitees’ sole negligence.
- 4.3.4 The indemnification obligations shall not be limited in any way by the limits of any insurance coverage or any limitation on the amount or type of damages, compensation, or benefits payable by, for, or to subcontractor or any other lower tier subcontractor, or any other individual or entity under any insurance policy, workers’ compensation acts, disability benefits acts, or other employee benefits acts
- 4.3.5. To the extent the indemnification obligations hereunder affect the permissible indemnity afforded to the indemnitees under applicable law, then any such offering indemnity clause shall be revised and interpreted in such a way as to provide the indemnitees the maximum permissible indemnity in accordance with the terms of the indemnity clause but only up to the limit permitted by applicable law

4.4 Release and Indemnification – Lower Tier Subcontractors and Supplier Claims

- 4.4.1 Subcontractor agrees to and shall release and defend, indemnify, and hold harmless HOUSTON WATERWORKS TEAM, the city, their agents, employees, officers, and legal representatives (collectively the “indemnitees”) from all claims or causes of action for payment or damages brought against the indemnitees by any person who furnishes or claims to have furnished any labor, services, materials or equipment in connection with the work.

THE FOLLOWING PRIME CONTRACT FLOW-DOWN PROVISIONS ARE INCORPORATED INTO AND MADE PART OF THIS SUBCONTRACT IN THEIR ENTIRETY:

Exhibit A – Definitions
Exhibit D – General Conditions
Exhibit G – Work Requirements
Exhibit K – EEO Requirements
Exhibit L – MWSBE Program Terms
Exhibit N – Pay or Play Terms
Exhibit P – Wage Rate Terms

Note: Exhibits, B, C, E, F, H, I, and J listed in the COH Flowdown Provisions are not applicable to the Subcontractor.

END SPECIAL CONDITIONS

4.0 CITY OF HOUSTON – FLOWDOWN PROVISIONS

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COH Flowdown - Exhibit A – Defined Terms

1.0 Article 1 - Interpretation

- 1.1 The Agreement including all Contract Documents will be interpreted in accordance with the following:
- 1.1.1 **General** The interpretation and miscellaneous provisions of the General Conditions apply to all Contract Documents and Work. Where the Contract Documents identify a particular article or section by reference to the Agreement, such reference is to the document signed by the Parties and binding the Parties to the Contract Documents as of the Effective Date, containing the name of the Design-Builder and the title and location of the Project. In all other circumstances, references to the Agreement in the Contract Documents have the meaning specified in this Exhibit A to include all Contract Documents.
 - 1.1.2 **Entire Agreement.** This Agreement, including all Contract Documents, contains the entire agreement between the parties hereto with respect to the transactions contemplated by this Agreement. Without limiting the generality of the foregoing, this Agreement shall completely and fully supersede all other understandings and agreements among the parties with respect to such transactions, including those contained in the RFQ, the submittal made by the Design-Builder in response thereto, the RFP, the proposal made by the Design-Builder in response thereto, and any amendments or supplements to any such documents.
 - 1.1.3 **Gender and Plurality.** Words of the masculine gender mean and include correlative words of the feminine and neuter genders and words importing the singular number mean and include the plural number and vice versa
 - 1.1.4 **Headings.** The table of contents and any headings preceding the text of the articles, sections and subsections of this Agreement shall be solely for convenience of reference and shall not affect its meaning, construction or effect.
 - 1.1.5 **References Hereto.** The terms “hereto,” “hereby,” “hereof,” “herein,” “hereunder,” and any similar terms refer to this Agreement.
 - 1.1.6 **References to Including.** The words “include,” “includes,” and “including” are to be construed as meaning “include without limitation,” “includes without limitation,” and “including without limitation,” respectively.
 - 1.1.7 **References to Statutes.** Each reference to a statute or statutory provision includes any statute or statutory provision which amends, extends, consolidates, or replaces the statute or statutory provision or which has been amended, extended, consolidated, or replaced by the statute or statutory provision and includes any orders, regulations, by-laws, ordinances, codes of practice, or instruments made under the relevant statute.
 - 1.1.8 **References to Governmental Authorities.** Each reference to the City or a Governmental Authority is deemed to include a reference to any successor to the City or such Governmental Authority or any organization or entity which has taken over the functions or responsibilities of the City or such Governmental Authority.

Each reference to a private Person that is not an individual is deemed to include a reference to its successors and permitted assigns.

- 1.1.9 **References to Documents and Standards.** Each reference to an agreement, document, standard, principle or other instrument includes a reference to that agreement, document, standard, principle or instrument as amended, supplemented, substituted, novated or assigned.
- 1.1.10 **Delivery of Documents in Digital Format.** In this Agreement, the Design-Builder is obligated to deliver reports, records, designs, plans, drawings, specifications, proposals, and other documentary submittals in connection with the performance of its duties hereunder. The Design-Builder agrees that all such documents shall be submitted to the City both in printed form (in the number of copies indicated) and, at the City's request, in digital form. Digital copies shall consist of computer readable data submitted in any standard interchange format which the City may reasonably request to facilitate the administration and enforcement of this Agreement. In the event that a conflict exists between the signed or the signed and stamped hard copy of any document and the digital copy thereof, the signed or the signed and stamped hard copy shall govern.
- 1.1.11 **Severability.** If any provision of this Agreement is held to be invalid, unenforceable, or illegal to any extent, such provision may be severed and such invalidity, unenforceability, or illegality will not prejudice or affect the validity, enforceability, and legality of the remaining provisions of this Agreement. If any such provision of this Agreement is held to be invalid, unenforceable or illegal, the Parties will promptly endeavor in good faith to negotiate new provisions to eliminate such invalidity, unenforceability, or illegality and to restore this Agreement as nearly as possible to its original intent and effect
- 1.1.12 **Drafting Responsibility.** The Parties waive the application of any rule of law which otherwise would be applicable in connection with the construction of this Agreement to the effect that ambiguous or conflicting terms or provisions should be construed against the Party who (or whose counsel) prepared the executed agreement or any earlier draft of the same.
- 1.1.13 **Counterparts.** This Agreement may be executed in any number of original counterparts. All such counterparts shall constitute but one and the same Agreement.
- 1.1.14 **Governing Law.** This Agreement and all of the rights and obligations of the Parties hereto and all of the terms and conditions hereof shall be construed, interpreted and applied in accordance with and governed by and enforced under the laws of the State of Texas. Venue for litigation shall be located in Harris County, Texas.

Article 2 - Definitions

- 2.1 As used in the Contract Documents, the following items shall have meanings set forth below:
 - 2.1.1 **"Acceptance Standards"** means the standards of performance the Project Facilities will be required to achieve during the performance of Acceptance Testing, as described in Section 4.6 of Exhibit G.
 - 2.1.2 **"Acceptance Test"** means the performance testing required to achieve Substantial Completion, as described in Section 4.5 of Exhibit G.
 - 2.1.3 **"Acceptance Testing"** means all work, activities, and tasks the Design-Builder is required to undertake or perform in carrying out and successfully completing the Acceptance Test.

- 2.1.4 **"Acceptance Testing Plan"** means the plan for Acceptance Testing required by subsection 4.3.2.2 of Exhibit G.
- 2.1.5 **"Acceptance Testing Report"** means the report prepared and submitted by the Design-Builder in accordance with Section 4.5.2 of Exhibit G
- 2.1.6 **"Additional Preliminary Services"** means Preliminary Services authorized by City-directed Modification, including those services designated as Additional Preliminary Services in Section 5.1.2 of Exhibit B.
- 2.1.7 **"Affiliate"** means, with respect to any particular company or entity, a company or entity that: (a) owns and controls, directly or indirectly, such company or entity; (b) is owned and controlled, directly or indirectly, by such company or entity; or (c) is owned and controlled, directly or indirectly, by the same company or entity that owns and controls such company or entity. Each Joint Venture Member is hereby deemed to be an Affiliate of the Design-Builder.
- 2.1.8 **"Agreement"** means this Design-Build Agreement between the City and the Design-Builder, including all Contract Documents.
- 2.1.9 **"Allowance"** means an estimated sum of money to be used only for a limited class of expenditures such as utility relocation costs, fees for special licenses or permits, or other "pass-through" costs that would be the same for any contractor. Cash Allowances may be used solely as specified in the Contract Documents.
- 2.1.10 **"Amendment"** means a material change, alteration, revision or modification of the terms and conditions of the Contract Documents, which is made in writing and duly authorized, approved or ratified by the City Council (as and to the extent required by the laws governing the City) and the Authorities (as and to the extent required by the Second Supplements) and duly authorized by the Design-Builder. Amendments include the Component 2 Preliminary Services Amendment, any Early Work Package Amendment, the GMP Amendment, and any Change Order.
- 2.1.11 **"Applicable Law"** means (1) any federal, state, City or local law, code or regulation, including all City rules and regulations; (2) any formally adopted and generally applicable rule, requirement, determination, standard, policy, implementation schedule, or other order of any Governmental Authority having appropriate jurisdiction; (3) any established interpretation of law or regulation utilized by an appropriate Governmental Authority if such interpretation is documented by such Governmental Authority and generally applicable; (4) any Governmental Approval; and (5) any consent order or decree, settlement agreement, or similar agreement between the City and any Governmental Authority, in each case having the force of law and applicable from time to time, over the Project or any transaction contemplated hereby.
- 2.1.12 **"Application for Payment"** means a written submission by Design-Builder in the form approved by Project Director and accompanied by all required supporting documentation, requesting payments of the Contract Compensation in accordance with the Contract Documents.
- 2.1.13 **"Appropriated Funds"** has the meaning specified in Section 7.5.3 of the Agreement.
- 2.1.14 **"Assumed Approval Issuance Date"** has the meaning specified in Section 3.2.6 of the General Conditions.
- 2.1.15 **"Authorities"** means the North Harris County Regional Water Authority, the Central Harris County Regional Water Authority, the West Harris County Regional Water Authority, and the North Fort Bend Water Authority, each a party to a Second Supplement with the City.
- 2.1.16 **"Bankruptcy Code"** means the United States Bankruptcy Code, 11 U.S.C. 101 et seq., as amended from time to time and any successor statute thereto. "Bankruptcy

Code” shall also include any similar state law relating to bankruptcy, insolvency, the rights and remedies of creditors, the appointment of receivers, or the liquidation of companies and estates that are unable to pay their debts when due.

- 2.1.17 **“Base Early Work Package Price”** means the amount agreed upon by City and Design- Builder as the amount payable by the City for Work performed by Design-Builder pursuant to an Early Work Package Amendment.
- 2.1.18 **“Base Guaranteed Maximum Price”** has the meaning specified in Section 5.7.2 of Exhibit F.
- 2.1.19 **“Base Guaranteed Maximum Price Adjustments”** has the meaning specified in Section 5.7.3 of Exhibit F.
- 2.1.20 **“Baseline Date”** means the effective Date; provided, however, that the Baseline Date shall be (a) the Early Work Package Amendment Date with respect to any Work performed pursuant to an Early Work Package Amendment, and (b) the GMP Amendment Date with respect to all matters hereunder following the GMP Amendment Date
- 2.1.21 **“Baseline Design Documents”** means the Specifications, Drawings, and other technical requirements for the performance of the Work developed by or on behalf of the Design-Builder through the performance of the Preliminary Services and established in any Early Work Package Amendment or GMP Amendment, as applicable
- 2.1.22 **“Basis of Design”** means the technical approach planned and design parameters to be used for the Project Facilities, as developed in accordance with the requirements of Exhibit B
- 2.1.23 **“Bonds”** means the performance and payments bonds and any other Surety instruments required by the Contract Documents.
- 2.1.24 **“Books and Records”** has the meaning specified in Section 3.25 of the General Conditions.
- 2.1.25 **“Business Enterprise”** means any business entity registered in a program authorized by 49 C.F.R. § 26 (where applicable) or City Code of Ordinances, Chapter 15, Article II, relating to Equal Opportunity Employment and taking affirmative action to ensure that applicants are employed and employees are treated without regard to race, religion, color, sex, national origin, or age. The term “Business Enterprise” may include any Disadvantaged Business Enterprise (“DBE”), Minority Business Enterprise (“MBE”), Woman Business Enterprise (“WBE”), Small Business Enterprise (“SBE”), Person with Disability Enterprise (“PDBE”), and any Historically Underutilized Business (“HUB”).
- 2.1.26 **“Business Enterprise Policy”** means Exhibit L (MWSBE Terms), other Contract Documents and applicable policies relating to Business Enterprises and authorized under 49 C.F.R. § 26 or City Code of Ordinances, Chapter 15, Article II.
- 2.1.27 **“Certificate of Final Completion”** means the certificate issued and signed by the Project Director pursuant to Section 9.7.2 of the General Conditions.
- 2.1.28 **“Certificate of Substantial Completion”** means the certificate issued and signed by the Project Director pursuant to Section 9.6.6 of the General Conditions.
- 2.1.29 **“Change in Law”** means any of the following acts, events, or circumstances to the extent that compliance with the change materially expands the scope, interferes with, delays, or increases the cost of performing the obligations of the Design-Builder hereunder:
 - 2.1.29.1 except as provided below with respect to the exclusions from the definition of “Change in Law”, the adoption, amendment, promulgation,

issuance, modification, repeal or written change in administrative or judicial interpretation of any Applicable Law on or after the Baseline Date, unless such Applicable Law was on or prior to the Baseline Date duly adopted, promulgated, issued, or otherwise officially modified or changed in interpretation, in each case in final form, to become effective without any further action by any Governmental Body; or

- 2.1.29.2 except as provided below with respect to the exclusions from the definition of “Change in Law”, the order or judgment of any Governmental Body issued on or after the Baseline Date (unless such order or judgment is issued to enforce compliance with Applicable Law which was effective as of the Baseline Date) to the extent such order or judgment is not the result of willful or negligent action, error or omission or lack of reasonable diligence of the Design-Builder; provided, however, that the contesting in good faith or the failure in good faith to contest any such order or judgment shall not constitute or be construed as such a willful or negligent action, error or omission or lack of reasonable diligence.

It is specifically understood, however, that none of the following shall constitute a “Change in Law”:

- 2.1.29.3 any Change in Law relating to Taxes other than a change in law pertaining to exemption from State of Texas and local sales Taxes;
- 2.1.29.4 a change in the nature or severity of the actions typically taken by a Governmental Body to enforce compliance with Applicable Law that was in effect as of the Baseline Date;
- 2.1.29.5 any increase in any fines or penalties provided for under Applicable Law in effect as of the Baseline Date;
- 2.1.29.6 any Change in Law (including the enactment of any statute, or the promulgation of any regulation) the terms and conditions of which do not impose more stringent or burdensome requirements on the Design-Builder than are imposed by the Contract Standards in effect as of the Baseline Date; or
- 2.1.29.7 any terms or conditions imposed in connection with any Governmental Approval, which are addressed exclusively in Section 3.2 of the General Conditions
- 3.1.30 **“Change Order”** means the written instrument prepared by City and signed by the Project Director and Design-Builder, specifying the following:
- 2.1.30.1 a change in the Work;
- 2.1.30.2 a change in Contract Compensation or Guaranteed Maximum Price; and
- 2.1.30.3 a change in Contract Time, if any.
- 2.1.31 **“City”** means the City of Houston, a home rule municipality located principally within Harris County, Texas, including its successors and its authorized representatives.
- 2.1.32 **“City Attorney”** means the City Attorney, or the City employee representing the City Attorney, and authorized to represent the City, or successors.
- 2.1.33 **“City Design Manual”** means the “City of Houston Infrastructure Design Manual” in effect on the Effective Date, a current version of which can be found on the internet at the following URL: http://documents.publicworks.houstontx.gov/document-center/cat_view/88-engineering-and-construction/90-design-manuals/364-city-of-houston-infrastructure-design-manual.html.

- 2.1.34 **"City-Designated Governmental Approvals"** means those Governmental Approvals that are the primary responsibility of the City, as specifically designated in subsection 2.4.2 of Exhibit G.
- 2.1.35 **"City-directed Modifications"** means any Modification issued by the Project Director that is not due to Design-Builder Fault or requested by the Design-Builder.
- 2.1.36 **"City Engineer"** means the City Engineer, or the City employee representing the City Engineer, designated in the Agreement and authorized to represent the City, or successors.
- 2.1.37 **"City Fault"** means any breach (including the untruth or breach at the time made of any City representation or warranty herein set forth), failure, non-performance or non-compliance by the City with respect to its obligations and responsibilities under the Contract Documents to the extent not directly attributable to Design-Builder Fault or any Uncontrollable Circumstance (excluding City Fault) and which materially and adversely affects the Design-Builder's rights, obligations, ability, or costs to perform under this Agreement.
- 2.1.38 **"City Geotechnical Reports"** means the geotechnical reports set forth in Appendix A to the Design Criteria Package.
- 2.1.39 **"City Technical Consultant"** means any individual or firm, or team of individuals or firms, under contract with the City, including subcontractors of any tier, and designated by the City from time to time as part of its management consulting, engineering, or construction monitoring team for purposes of administering this Agreement on behalf of the City.
- 2.1.40 **"Claim"** means a written demand or written assertion by one Party seeking adjustment of the Agreement, payment of money, extension of time, or other relief or remedy under the Contract Documents.
- 2.1.41 **"Collaboration Center"** has the meaning specified in Article 3 of Exhibit B.
- 2.1.42 **"Commissioning"** means all work, activities, and tasks the Design-Builder is required to undertake or perform in commissioning the Project Facilities, as generally described in Article 4 of Exhibit G.
- 2.1.43 **"Component"** as used for Commissioning and Acceptance means a basic building block of equipment, subsystems, and systems that requires pre-commissioning and is tested during Commissioning but does not have an electrical connection or internal electronics (for example, a manual isolation valve).
- 2.1.44 **"Component 1 Preliminary Services"** means those services designated as Component 1 Preliminary Services in Article 1 of Exhibit B.
- 2.1.45 **"Component 2 Preliminary Services"** means those services designated as Component 2 Preliminary Services in Article 2 of Exhibit B.
- 2.1.46 **"Component 2 Preliminary Services Amendment"** has the meaning specified in Section 2.2 of Exhibit F.
- 2.1.47 **"Component 2 Preliminary Services Amendment Date"** means the date the City Controller countersigns the Component 2 Preliminary Services Amendment.
- 2.1.48 **"Component 2 Preliminary Services Submittal"** means the proposal for the Component 2 Preliminary Services submitted by the Design-Builder to the Project Director, the requirements of which are set forth in Section 2.3 of Exhibit F.
- 2.1.49 **"Conceptual Design"** means the conceptual engineering design developed by the Design-Builder and submitted as part of its proposal in response to the RFP.
- 2.1.50 **"Construction"** means the part of the Work that is the result of performing or furnishing of labor, the furnishing or incorporating of materials and equipment into the Work and the

- furnishing of services (other than Design Professional Services) and documents, all as required by the Contract Documents
- 2.1.51 "Contract Administration Memorandum" has the meaning specified in Section 11.11 of the General Conditions.
- 2.1.52 "Contract Compensation" means the Preliminary Services Payment, the Final Design and Construction Price, and the Transition Services Fee
- 2.1.53 "Contract Documents" has the meaning specified in Section 2.1 of the Agreement.
- 2.1.54 "Contract Standards" means the standards, terms, conditions, methods, techniques and practices imposed or required by: (1) Applicable Law; (2) Good Engineering and Construction Practice; (3) the Baseline Design Documents; (4) the Acceptance Standards; (5) the Insurance Requirements; (6) Good Operating Practice, (7) applicable equipment manufacturers' and suppliers' requirements and recommendations; and (8) any other standard, term, condition or requirement specifically provided in the Contract Documents to be observed by the Design-Builder.
- 2.1.55 "Contract Times" has the meaning specified in Section 6.1 of the Agreement.
- 2.1.56 "Date of Commencement of the Work" means date established in Notice to Proceed on which Contract Time will commence.
- 2.1.57 "Date of Final Completion" means the date of the achievement of Final Completion, as specified in the Certificate of Final Completion.
- 2.1.58 "Date of Substantial Completion" means the date of the achievement of Substantial Completion, as specified in the Certificate of Substantial Completion.
- 2.1.59 "DB-Related Entity" means the Design-Builder, Design Subconsultants, Subcontractors, Suppliers, and anyone for whose acts any of the foregoing may be legally or contractually liable, including officers, directors, employees, representatives, agents, consultants, and contractors.
- 2.1.60 "Definitive Contract Amendment" means the Component 2 Preliminary Services Amendment, an Early Work Package Amendment, or the GMP Amendment.
- 2.1.61 "Definitive Project Submittal" means the Component 2 Preliminary Services Submittal, an Early Work Package Submittal, or the GMP Submittal.
- 2.1.62 "Design-Builder" means Houston Waterworks Team, a joint venture organized and existing under the laws of the State of Texas, and its permitted successors and assigns. Each reference to Design-Builder in the Contract Documents shall mean and include each Joint Venture Member, both individually and collectively.
- 2.1.63 "Design-Builder Contingency" has the meaning specified in Attachment F-3 to Exhibit F.
- 2.1.64 "Design-Builder Fault" means any breach (including the untruth or breach at the time made of any Design-Builder representation or warranty herein set forth), failure, non-performance or non-compliance by the Design-Builder or any DB-Related Entity with respect to Design-Builder's obligations and responsibilities under the Contract Documents to the extent not directly attributable to any Uncontrollable Circumstance and which materially and adversely affects the City's rights, obligations, ability, or costs to perform under this Agreement.
- 2.1.65 "Design Criteria Package" means the Design Criteria Package issued with Addendum 8 of the RFP, dated September 1, 2015.
- 2.1.66 "Design Manager" means the individual specified in Exhibit J, or such other individual as designated by the Design-Builder in accordance with Section 3.6 of the Agreement.
- 2.1.67 "Design Professional Services" means the part of the Work comprised of services relating to the preparation of Drawings, Specifications and other design submittals specified by the Contract Documents and required to be performed by licensed design

- professionals, as well as all other services required to be performed by licensed design professionals as part of the Work for the design and engineering of the Project Facilities, including professional engineering, architectural, and land surveying services.
- 2.1.68 “Design Subconsultant” means a qualified, licensed design professional, eligible under the laws of the State of Texas to provide Design Professional Services, who is not an employee of Design-Builder but is retained by Design-Builder to provide Design Professional Services through a Subcontract.
- 2.1.69 “Device” as used for Commissioning and Acceptance means a basic building block of equipment, subsystems, and systems that requires pre-commissioning and is tested during Commissioning and has an electrical connection or internal electronics (for example, a filter level transmitter).
- 2.1.70 “Differing Site Conditions” has the meaning specified in Section 3.18.2 of the General Conditions.
- 2.1.71 “Director” means the Director of the Public Works and Engineering Department (“PWE”) or his or her written designee, as may be modified in writing by the PWE Director from time to time.
- 2.1.72 “Drawings” means Drawings, diagrams, illustrations, schedules and other data that show the scope, extent, and character of the Work, as prepared by or on behalf of the Design-Builder.
- 2.1.73 “Early Work Package” has the meaning specified in Section 4.4 of the Agreement.
- 2.1.74 “Early Work Package Amendment” has the meaning specified in Section 3.2 of Exhibit F.
- 2.1.75 “Early Work Package Amendment Date” means the date the City Controller countersigns an Early Work Package Amendment.
- 2.1.76 “Early Work Package Submittal” means the proposal for the Early Work Package which are set forth in Section 3.3 of Exhibit F.
- 2.1.77 “Effective Date” means the date the City Controller countersigns this Agreement.
- 2.1.78 “Encumbrance” means any Lien, lease, mortgage, security interest, charge, judgment, judicial award, attachment or encumbrance of any kind with respect to the Work or the Project Facilities.
- 2.1.79 “Engineer-of-Record” means the professional engineer licensed in the State of Texas in good standing who is selected by the Design-Builder in accordance with Section 2254.004 of the Texas Government Code and acceptable to the City, in its reasonable discretion, as the engineer responsible for the Professional Design Services relating to a portion of or all of the Project Facilities.
- 2.1.80 “Equipment” as used for Commissioning and Acceptance means an assembly of component(s) and/or device(s) that requires Pre-commissioning and is tested during Commissioning and has an electrical connection or internal electronics (for example, a transfer pump with motor, pump, and possibly a variable frequency drive (VFD)).
- 2.1.81 “Equipment and Subsystem Testing” means the testing of individual equipment and subsystems within a system required by Section 4.4.2 of Exhibit G.
- 2.1.82 “Event of Default” has the meaning specified in Section 12.1.1 of the General Conditions.
- 2.1.83 “Exhibit” means any of the Exhibits and, as applicable, any attachments thereto, that are appended to this Agreement and identified as such in the table of contents to this Agreement.
- 2.1.84 “Existing Plant” means the City of Houston’s existing Northeast Water Purification.

- 2.1.85 "Existing Plant" means the City of Houston's existing Northeast Water Purification changes in the Work but which does not materially change Design-Builder's obligations under the Contract Documents.
- 2.1.86 "Final Completion" means satisfaction by the Design-Builder of all requirements for achieving Final Completion as set forth in the Contract Documents, including Section 9.7 of the General Conditions, and the Project Director issues a Certificate of Final Completion.
- 2.1.87 "Final Design and Construction" means everything required to be furnished and done for and relating to the design and construction of the Project Facilities pursuant to this Agreement, other than the Preliminary Services and the Transition Services. Final Design and Construction includes the employment and furnishing of all labor, materials, equipment, supplies, tools, scaffolding, transportation, utilities, insurance, temporary facilities and other things and services of every kind whatsoever necessary for the full performance and completion of the Design-Builder's design, engineering, procurement, construction, Acceptance Testing, obtaining and maintaining Governmental Approvals, and related obligations with respect to the design and construction of the Project Facilities under this Agreement, including all completed structures, assemblies, fabrications, acquisitions and installations, all testing, and all of the Design-Builder's administrative, accounting, recordkeeping, notification and similar responsibilities of every kind whatsoever under this Agreement pertaining to such obligations, as well as the Warranty Work. A reference to Final Design and Construction shall mean any part and all of the Final Design and Construction unless the context otherwise requires, and shall include all Final Design and Construction authorized by a Modification.
- 2.1.88 "Final Design and Construction Costs" has the meaning specified in Section 5.3 of Exhibit F.
- 2.1.89 "Final Design and Construction Documents" means all technical documents required to be prepared by Design-Builder for the performance of Work following the establishment of the Baseline Design Documents, including (a) Specifications, Drawings and all other Work Product generated through the performance of the Design Professional Services following the establishment of the Baseline Design Documents, including the Issued for Construction Documents, and (b) all technical criteria, written descriptions and design data necessary for obtaining Governmental Approvals and performing Construction, such as shop drawings, product data and samples whether or not such documents or data are required to be prepared by licensed design professionals. Final Design and Construction Documents other than Drawings and Specifications that have been accepted by the City pursuant to the Submittal Protocol are not Contract Documents.
- 2.1.90 "Final Design and Construction Fee" has the meaning specified in Section 5.6 of Exhibit F.
- 2.1.91 "Final Design and Construction Price" has the meaning specified in Section 5.2.2 of Exhibit f.
- 2.1.92 "Final Design and Construction Limit of Liability" has the meaning specified in Section 6.4 of Exhibit H.
- 2.1.93 "General Conditions" means the requirements, terms, and conditions set forth in the General Conditions.
- 2.1.94 "General Conditions Costs" are the costs generally described in Attachment F-1 to Exhibit F.
- 2.1.95 "General Conditions Payment" has the meaning specified in Section 5.5 of Exhibit F.
- 2.1.96 "GMP Amendment" has the meaning specified in Section 4.3.2 of Exhibit F.
- 2.1.97 "GMP Amendment Date" means the date the City Controller countersigns the GMP Amendment.

- 2.1.98 “GMP Submittal” means the proposal for the GMP Amendment submitted by the Design-Builder to the Project Director, the requirements of which are set forth in Section 4.2 of Exhibit F.
- 2.1.99 “Good Engineering and Construction Practice” means those methods, techniques, standards, and practices which, at the time they are to be employed and in light of the circumstances known or reasonably believed to exist at such time, are generally recognized and accepted as good engineering, equipping, installation, construction, commissioning, and testing practices for the design, construction, and improvement of capital assets in the water treatment industry using the design-build delivery method, as followed in the United States.
- 2.1.100 “Good Operating Practice” means those methods, techniques, standards, and practices which, at the time they are to be employed and in light of the circumstances known or reasonably believed to exist at such time, are generally recognized and accepted as good operation, maintenance, repair, replacement, and management practices in the municipal water treatment industry, as followed in the United States.
- 2.1.101 “Governmental Approvals” means any permit, license, authorization, consent, certification, exemption, ruling, entitlement, or approval issued by a Governmental Authority of whatever kind and however described, which is required under Applicable Law to be obtained or maintained by any person with respect to the Work, including the City-Designated Governmental Approvals.
- 2.1.102 “Governmental Authority” means any federal, foreign, state, local, or municipal governmental body; any governmental, regulatory or administrative agency, commission, body, or other authority exercising or entitled to exercise any administrative, executive, judicial, legislative, policy, regulatory, or taxing authority or power; or any court or governmental tribunal.
- 2.1.103 “Guaranteed Maximum Price” or “GMP” has the meaning specified in Section 5.7.1 of Exhibit F.
- 2.1.104 “Holdback Amount” has the meaning specified in Section 1.4 of Exhibit C.
- 2.1.105 “Inclement Weather” means unusually severe and abnormal weather compared with the ten-year average weather statistics compiled by the United States National Oceanic and Atmospheric Administration for the time of year and locality of the Project Site.
- 2.1.106 “Inspector” means the City’s employee or agent authorized to assist with inspection of the Work.
- 2.1.107 “Insurance Requirements” means any rule, regulation, code, or requirement issued by any insurance company that has issued a policy of Required Insurance or by any insurance company that has issued a policy of insurance required to be obtained and maintained by the City in connection with this Agreement, compliance with which is a condition to the effectiveness of such policy.
- 2.1.108 “Issued for Construction Drawings and Specifications” means the Drawings and Specifications, which have been approved by TCEQ and accepted by the City in accordance with the Submittal Protocol for the commencement of Construction of all or any portion of the Work.
- 2.1.109 “Joint Venture Member” means CDM Constructors Inc., a corporation, duly organized, validly existing, and in good standing under the laws of Massachusetts, and CH2M Hill Engineers, Inc., a corporation, duly organized, validly existing, and in good standing under the laws of Delaware.
- 2.1.110 “Legal Holiday” means a day established by City Council as a holiday.
- 2.1.111 “Legal Proceeding” means any action, suit, litigation, arbitration, administrative proceeding, and other legal or equitable proceeding, and all appeals therefrom.

- 2.1.112 "Lien" means any and every lien against the Work or the Project Facilities or against any monies due or to become due from City to Design-Builder under this Agreement, for or on account of the Work, including mechanics', materialmen's, laborers', and lenders' liens
- 2.1.113 "Major Amendment" means a GMP Amendment, any Early Work Package Amendment, or any Change Order requiring the approval of City Council.
- 2.1.114 "Major Subcontract" means any Subcontract for the construction of the mechanical, electrical and plumbing systems and equipment included in the Project Facilities, any other Subcontract with a contract value exceeding \$5,000,000, or any other Subcontract designated as a Major Subcontract by the Project Director.
- 2.1.115 "MEOC Plan" has the meaning specified in Section 6.1 of the General Conditions.
- 2.1.116 "MGD" means million gallons per day.
- 2.1.117 "Modification" means a Change Order, Work Change Directive, or Field Order, all of which are required to be in writing.
- 2.1.118 "Non-Binding Mediation" means the voluntary system of dispute resolution through third-party mediation established by Section 4.6 of the General Conditions for the resolution of any dispute arising under this Agreement.
- 2.1.119 "Notice of Noncompliance" means a written notice by the Project Director to Design-Builder regarding defective or nonconforming Work that does not meet the Contract Standards, and that establishes a time by which Design-Builder shall correct the defective or nonconforming Work.
- 2.1.120 "Notice to Proceed" or "NTP" means an authorization issued by the Project Director to Design-Builder authorizing Design-Builder to commence performing a portion of the Work, per the Notice to Proceed.
- 2.1.121 "Operating Standards" has the meaning specified in subsection 5.6.1 of Exhibit G.
- 2.1.122 "Operations and Maintenance Manual" means the operations and maintenance manual for the Project Facilities to be developed by the Design-Builder in accordance with Section 5.2 of Exhibit G.
- 2.1.123 "Original Appropriation" has the meaning specified in Section 7.5.2 of the Agreement.
- 2.1.124 "Parent Company Guaranty" means, in the case of the Joint Venture Member CH2M Hill Engineers, Inc., the Parent Company Guaranty executed by CH2M HILL Companies, Ltd. to the City, and in the case of the Joint Venture Member CDM Constructors Inc., the Parent Company Guaranty executed by CDM Smith Inc. to the City, each in the form set forth in Exhibit H-6 to Exhibit H, as the same may be amended from time to time in accordance therewith.
- 2.1.125 "Parties" has the meaning specified in the preamble of the Agreement.
- 2.1.126 "Performance Guarantees" has the meaning specified in subsection 5.7.1 of Exhibit G.
- 2.1.127 "Phase" means a discrete portion of the Work, as determined by the Project Director in his sole discretion.
- 2.1.128 "Phase I Project Facilities" has the meaning specified in Article 1 of the Agreement.
- 2.1.129 "Phase II Project Facilities" has the meaning specified in Article 1 of the Agreement.
- 2.1.130 "Phase I Scheduled Substantial Completion Date" has the meaning specified in subsection 4.2.4 of Exhibit F.
- 2.1.131 "Phase II Scheduled Substantial Completion Date" has the meaning specified in Subsection 4.2.4 of Exhibit F.

- 2.1.132 "Person" means any individual, corporation, partnership (including general partnerships and limited partnerships), company, limited liability company, joint venture, association, trust, business trust, unincorporated organization, firm, or other entity of whatever nature, including Governmental Authorities.
- 2.1.133 "Pollutant" means any materials subject to the Texas Solid Waste Disposal Act.
- 2.1.134 "Pollutant Facility" means any facility regulated by the State of Texas to protect the health and environment from contamination by Pollutants, including landfills, oil and gas production and storage facilities, wastewater facilities, waste injection wells, and storage tanks (including drums).
- 2.1.135 "Pre-Existing Intellectual Property" has the meaning specified in Section 1.3.4 of the General Conditions.
- 2.1.136 "Preliminary Services" means the Component 1 Preliminary Services, the Component 2 Preliminary Services and any Additional Preliminary Services.
- 2.1.137 "Preliminary Services Payment" means the amount payable to the Design-Builder for the performance of the Preliminary Services, as determined in accordance with Exhibit C.
- 2.1.138 "Preliminary Services Limit of Liability" has the meaning specified in Section 6.2 of Exhibit H.
- 2.1.139 "Preliminary Services Schedule" means the schedule for the performance of the Preliminary Services, as developed in accordance with Section 1.1.5 of Exhibit B.
- 2.1.140 "Progress Report" has the meaning specified in Section 3.1.5 of the General Conditions.
- 2.1.141 "Project" means the Project Facilities, the Project Site and the Work.
- 2.1.142 "Project Director" means the individual identified in the preamble to this Agreement or his written designee, as may be modified in writing by the Project Director or the Director from time to time.
- 2.1.143 "Project Facilities" has the meaning specified in Article 1 of the Agreement. The Project Facilities include both the Phase I Project Facilities and the Phase II Project Facilities
- 2.1.144 "Project Management Plan" has the meaning specified in Section 3.1 of Exhibit E.
- 2.1.145 "Project Manager" means the individual specified in Exhibit J, or such other individual as designated by the Design-Builder in accordance with Section 3.6 of the Agreement.
- 2.1.146 "Project Schedule" means the Design-Builder's critical path method completion schedule for the performance of the Work, as developed, updated and maintained by the Design-Builder in accordance with the Contract Standards.
- 2.1.147 "Project Site" means the parcel of real property on which the Project Facilities are to be constructed by the Design-Builder, as more particularly described in Exhibit I.
- 2.1.148 "Project Warranties" has the meaning specified in Section 2.7.1 of Exhibit G.
- 2.1.149 "Project Warranties Period" has the meaning specified in in Section 2.7.2 of Exhibit G.
- 2.1.150 "Proposal" means the Design-Builder's proposal submitted in response to the RFP.
- 2.1.151 "Raw Water" means water pumped to the Project Facilities from Lake Houston for treatment.
- 2.1.152 "Record Documents" has the meaning specified in Section 10.6.1 of Exhibit E.
- 2.1.153 "Related Projects" has the meaning specified in Section 3.4 of the Agreement.
- 2.1.154 "Relief Event Delay" has the meaning specified in Section 8.2.1 of the General Conditions.

- 2.1.155 "Required Insurance" means the insurance policies and coverage required to be provided by the Design-Builder for the performance of the Work, as described in Article 1 of Exhibit H.
- 2.1.156 "RFP" has the meaning specified in the recitals to the Agreement.
- 2.1.157 "Safety Impact Position" means a Design-Builder's employment position involving duties that if performed with inattentiveness, errors in judgment, or diminished coordination, dexterity, or composure may result in mistakes that could present a real and/or imminent threat to the personal health or safety of the employee, co-workers, and/or the public.
- 2.1.158 "Schedule of Values" means the detailed, itemized list of prices and costs that establishes the value of each part or component of the Work, developed by Design-Builder in accordance with the Contract Standards and accepted by Project Director to serve as the basis for progress payments for the Work.
- 2.1.159 "Scheduled Substantial Completion Date" means the Phase I Scheduled Substantial Completion Date and the Phase II Scheduled Substantial Completion Date.
- 2.1.160 "Second Supplement" has the meaning specified in the recitals to the Agreement.
- 2.1.161 "Separate Contractor" means any Person under contract with the City or any Authority, including subcontractors of any tier, for the performance of work associated with a Related Project.
- 2.1.162 "Specifications" means the documents prepared by or on behalf of Design-Builder comprising written technical descriptions of materials, equipment, construction systems, standards, and workmanship for the Work and certain administrative details applicable thereto.
- 2.1.163 "Subcontract" means any contract entered into by the Design-Builder or any other DB-Related Entity of any tier, with one or more Persons in connection with the carrying out of the Design-Builder's obligations under this Agreement, whether for the furnishing of labor, materials, equipment, supplies, services (including Design Professional Services), or otherwise.
- 2.1.164 "Subcontractor" means any Person that enters into a Subcontract, other than the Design-Builder, any Design Subconsultant, or any Supplier.
- 2.1.165 "Submittal Protocol" has the meaning specified in Section 4.2 of Exhibit E.
- 2.1.166 "Substantial Completion" satisfaction by the Design-Builder of all requirements for achieving Substantial Completion as set forth in the Contract Documents, including Section 9.6 of the General Conditions, and the Project Director issues a Certificate of Substantial Completion.
- 2.1.167 "Subsystem" as used for Commissioning and Acceptance means a building block of a system made up from a grouping of components, devices, and equipment that perform a definable function and requires Commissioning (for example, a sludge removal system in a sedimentation basin).
- 2.1.168 "Superintendent" means an employee of Design-Builder having authority and responsibility to act for and represent Design-Builder.
- 2.1.169 "Supplemental Appropriation" has the meaning specified in Section 7.5.2 of the Agreement.
- 2.1.170 "Supplier" means the manufacturer, distributor, materialman, fabricator, distributor, vendor, or other supplier having a Subcontract with any DB-Related Entity to furnish materials, equipment, or supplies in connection with the Work.
- 2.1.171 "Surety" means any surety company issuing a Bond, including any co-surety or other entity similarly obligated under the Bond.

- 2.1.172 "System" as used for Commissioning and Acceptance means a grouping of components, devices, equipment, and subsystems that perform a definable function and requires Commissioning (for example, Filter No. 1).
- 2.1.173 "System Testing" means the functional testing of systems required by Section 4.4.3 of Exhibit G.
- 2.1.174 "Taxes" means any tax, fee, levy, duty, impost, charge, surcharge, assessment or withholding, or any payment-in-lieu thereof, and any related interest, penalty, or addition to tax.
- 2.1.175 "TCEQ" means the Texas Commission on Environmental Quality.
- 2.1.176 "Termination Date" means the effective date of any early termination under the Contract Documents, as specified in the notice of termination.
- 2.1.177 "Transition Period" has the meaning specified in Section 6.4 of the Agreement.
- 2.1.178 "Transition Services" means the services required to be performed by the Design-Builder to assist the City in the operations and maintenance of the Project Facilities during the Transition Period, as set forth in Article 5 of Exhibit G.
- 2.1.179 "Transition Services Fee" means the amount payable to the Design-Builder for the performance of the Transition Services, as established in the GMP Amendment.
- 2.1.180 "Treated Water" means Raw Water which has been treated at the Project Facilities for conveyance to the Water Systems.
- 2.1.181 "TWDB" means the Executive Administrator of the Texas Water Development Board, or other person who may be at the time acting in the capacity or authorized to perform the functions of such Administrator, or the authorized representative thereof.
- 2.1.182 "TWDB Supplemental Conditions and Instructions" means the Texas Water Development Board Supplemental Conditions and Instructions for State Loan Projects Funded through Water Development Fund II State Participation & Rural Water Assistance, revised 2/18/2014.
- 2.1.183 "Ultra-Low Sulfur Diesel Fuel" has the meaning specified in Section 3.12.1.1 of the General Conditions.
- 2.1.184 "Unallowable Costs" has the meaning specified in subsection 5.4.2 of Exhibit F.
- 2.1.185 "Uncontrollable Circumstance" means any act, event, or circumstance that (a) is beyond the reasonable control of the Party relying on it as a justification for not performing an obligation or complying with any condition required of the Party under the Contract Documents, and (b) materially expands the scope, interferes with, delays or increases the cost of performing the Party's obligations under this Agreement, to the extent that such act, event or condition is not the result of the willful or negligent act, error or omission, failure to exercise reasonable diligence, or breach of this Agreement on the part of the Party claiming the occurrence of an Uncontrollable Circumstance. Subject to the foregoing, Uncontrollable Circumstances may include the acts, events, or circumstances described in Section 7.8.1 of the General Conditions. In no event will the acts, events, or circumstances described in Section 7.8.2 of the General Conditions constitute Uncontrollable Circumstances hereunder.
- 2.1.186 "Underground Facilities" means pipes, conduits, ducts, cables, wires, manholes, vaults, tanks, tunnels, or other such facilities or attachments and encasements containing such facilities that exist below ground level.
- 2.1.187 "Unit Price" means an amount stated in the Contract Documents for an individual, measurable item of work, which, when multiplied by actual quantity incorporated into the Work, amounts to full compensation for completion of the item, including work incidental to it.

- 2.1.188 "VE Team" has the meaning specified in Section 6.3 of Exhibit E.
- 2.1.189 "Warranty Work" means all work and services required to be performed by the Design-Builder pursuant to the Project Warranties.
- 2.1.190 "Water Systems" means the drinking water systems of the City and the Authorities
- 2.1.191 "Work" means all services, supervision, labor, materials, supplies, equipment, products and other items for any Phase required to perform this Agreement (whether completed or partially completed) in strict accordance with the Contract Standards, including all things reasonably inferable from the Contract Documents and all of the foregoing provided by or on behalf of Design-Builder to fulfill its obligations under the Contract Documents, and including the Preliminary Services, the Final Design and Construction, the Warranty Work, and the Transition Services. Work includes, and is the result of performing or furnishing, Design Professional Services and Construction.
- 2.1.192 "Work Change Directive" means a written change in the Work, ordered by Project Director, that is within the general scope of this Agreement and consisting of additions, deletions, or other revisions. A Work Change Directive will state the proposed basis for adjustment, if any, in the Contract Compensation or Contract Time, or both.
- 2.1.193 "Work Product" means all Drawings, Specifications, Final Design and Construction Documents, and other documents or data required hereunder to be prepared or furnished by or on behalf of Design-Builder and submitted to the City, including the Baseline Design Documents

END OF DEFINED TERMS – COH FLOWDOWNS EXHIBIT A

COH Flowdown - Exhibit D – General Conditions – Design-Build Contracting

Article 1 – General Provisions

1.1 Definitions

1.1.1 Capitalized terms have the meanings set forth in Exhibit A

1.2 Execution, Correlation and Intent

1.2.1 It is the intent of the Contract Documents to describe functionally complete Project Facilities (or parts thereof) to be designed and constructed by the Design-Builder in accordance with the Contract Standards. Any labor, documentation, services, materials or equipment that may reasonably be inferred from the Contract Documents or from prevailing custom or trade usage as being required to produce the intended result will be furnished and performed by Design-Builder whether or not specifically called for, at no additional cost to the City.

1.2.2 References to standards, specifications, manuals or codes of any technical society, organization or association, whether specific or implied, mean the latest edition in effect as of the Baseline Date, except as may be otherwise specifically stated in the Contract Documents. Unless otherwise specified to the contrary, (a) all such standards, specifications, manuals or codes shall apply as if incorporated in the Contract Documents and (b) if any material revision occurs, to the Design-Builder's knowledge, after the Baseline Date, and prior to completion of the applicable Work, the Design-Builder shall notify the City. If so directed by the City through a Work Change Directive or Change Order, the Design-Builder shall perform the applicable Work in accordance with the revised standard, specification, manual or code, subject to the Design-Builder's rights with respect to Work Change Directives and Change Orders at the direction of the City.

1.2.3 Reference to a specific requirement of a cited standard, specification, manual or code shall include all general requirements of the entire cited standard, specification, manual or code pertinent to the specific reference.

1.2.4 No provision of any referenced standard, specification, manual or code changes the duties and responsibilities of City, the Project Director or City Engineer from those set forth in the Contract Documents, nor shall it be effective to assign to the City, the Project Director or City Engineer any duty or responsibility inconsistent with the Contract Documents.

1.2.5 The Project Director's written determination of any conflict, ambiguity or uncertainty in the Contract Documents or the Contract Standards shall be final and binding upon the Parties.

1.2.6 Unless otherwise defined in the Contract Documents, words which have well-known construction industry technical meanings are used in this Agreement in accordance with these recognized meanings.

1.2.7 The word "furnish" when used in connection with services, materials or equipment, means to supply and deliver such services, materials or equipment to the Project Site (or other specified location) ready for use or installation in accordance with the Contract Standards.

1.2.8 The word "install" when used in connection with services, materials or equipment, means to put into use or place into final position such services, materials or equipment in a manner complete and ready for use in accordance with the Contract Standards.

1.2.9 The words "perform" or "provide" when used in connection with services, materials or equipment, means to furnish and install such services, materials and equipment.

1.2.10 When the Contract Documents use the capitalized term "Contractor," that term shall be deemed to refer to Design-Builder unless otherwise indicated.

1.2.11 In the interest of brevity, the Contract Documents frequently omit modifying words such as "all" and "any" and articles such as "the" and "an", but an absent modifier or article is not intended to affect interpretation of a statement. The interpretation provisions set forth in Exhibit A are applicable to these General Conditions and all other Contract Documents.

1.3 Ownership and Use of Work Product

1.3.1 Design-Builder hereby assigns to the City all right, title, and interest, including any copyrights, patents, or any other intellectual property rights (but excluding Pre-Existing Intellectual Property, as defined in Section 1.3.4), in all Work Product and all ideas or methods specifically developed for such Work Product. All Work Product will become the property of the City on the earlier of: (a) the City's payment to Design-Builder of monies due in accordance with this Agreement, (b) the date any Work Product is delivered to the City, or (c) upon any

termination of this Agreement. The City's use of any Work Product for any purpose other than the Project shall be at its own risk, and the Design-Builder shall have no liability for or relating to any such use.

1.3.2 Except as specifically provided in Section 1.3.4, no DB-Related Entity will own or claim any copyright, patent, or any other intellectual property right in or with respect to any Contract Document, Work Product, or any part of this Agreement.

1.3.3 Design-Builder may make and retain copies of the Contract Documents and Work Product for information, reference and use by the DB-Related Entities solely with respect to the Work. No DB-Related Entity may use the Contract Documents or Work Product for any other purpose without the specific written consent of the Project Director.

1.3.4 The City acknowledges and agrees that in the performance of services under this Agreement, Design-Builder may use proprietary algorithms, software, hardware, databases, other background technology, and other proprietary information that Design-Builder developed or licensed from third parties prior to the Effective Date ("Pre-Existing Intellectual Property"). Without limiting the City's rights with respect to the Work Product or the Project Facilities, Design-Builder will retain all right, title, and interest in such Pre-Existing Intellectual Property. However, the City shall have the irrevocable, perpetual, and unrestricted right from and after the Effective Date to use (or permit use of) all Pre-Existing Intellectual Property incorporated in the Work Product or the Project Facilities, all oral information received by the City in connection with the Work, and all ideas or methods represented by Pre-Existing Intellectual Property incorporated in the Work Product or the Project Facilities, in each case without additional compensation. Design-Builder hereby licenses such irrevocable, perpetual, and unrestricted rights to the City. The City's use of such license rights for any purpose other than the Project shall be at its own risk, and the Design-Builder shall have no liability for or relating to any such use.

1.4 Bonds and Insurance

1.4.1 Design-Builder shall obtain, provide and maintain the Bonds as security for the faithful performance and payment of all Design-Builder obligations to perform and pay for the Work, including all Design Professional Services. The Bonds shall be provided and maintained in accordance with the requirements specified in Exhibit H. The Bonds shall be in the amounts and in the forms required by, and subject to all terms and conditions specified in, Exhibit H.

1.4.2 Design-Builder shall obtain, provide and maintain the Required Insurance in accordance with Exhibit H. The failure of Design-Builder to obtain and maintain any Required Insurance shall not relieve Design-Builder of its liability for any losses or be a satisfaction of any Design-Builder liability under this Agreement. The Required Insurance shall not in any way limit or modify Design-Builder's indemnity obligations hereunder. Subject to Section 3.16, whenever this Agreement obligates City to pay any amount to Design-Builder in respect of an event or circumstance for which, or with respect to the consequences of which, an insurance claim may be made by Design-Builder under the Required Insurance, the amount which City is obligated to pay will be reduced by the amount of insurance proceeds which the Design-Builder recovers or would have been entitled to recover if it had complied with the requirements of this Agreement or any policy of Required Insurance.

Article 2 – City

2.1 Administration, Approvals and Consents

2.1.1 The Project Director will administer this Agreement on behalf of the City and will act as the City's liaison with the Design-Builder in connection with administrative matters hereunder. The Design-Builder understands and agrees that the Project Director has only limited authority with respect to the implementation of this Agreement and cannot bind the City to incur costs in excess of the amounts appropriated therefor. The Project Director's authority to issue Modifications is as specified in Article 7.

2.1.2 Subject to Section 2.1.1, when this Agreement requires any approval, consent or authorization by the City to a Design-Builder submission, request or report, the approval, consent or authorization will be subject to the determination of the Project Director or, if specified in the Contract Documents, the City Engineer. The determination of the Project Director or the City Engineer, as applicable, shall be in writing and such writing shall be conclusive evidence of such determination, subject only to compliance by the City with the Applicable Law that governs its affairs.

2.1.3 No approval, authorization, decision or consent given by a City officer, employee or representative other than the Project Director or the City Engineer, as applicable, will have any binding effect on the City. Where the Contract Documents indicate that an approval, authorization, decision or consent is subject to the determination of the City Engineer, the Project Director's determination will not be sufficient to bind the City.

2.1.4 The Project Director may appoint others to act as its designee for specific matters under this Agreement; provided that such delegation shall be in writing and include a specific delegation of the extent of the designee's power to administer this Agreement, including a specific dollar limitation of his or her authority. The Design-Builder shall be entitled to a copy of any such written delegation. The Design-Builder understands and agrees that any such delegation may provide only limited authority with respect to the implementation of this Agreement, which may or may not include the authority to bind the City with respect to any Modification.

2.1.5 The Project Director will resolve matters of interpretation or performance of this Agreement, which are not Claims. City Engineer will review, consider and resolve Claims in accordance with Section 4.5.

2.2 Duties of the City

2.2.1 This Agreement imposes no implied duty on the City.

2.2.2 Except as expressly stated in this Agreement, the City owes no duty to the Design-Builder or any other DB-Related Entity.

2.3 Availability of Land and use of Project Site

2.3.1 The City will furnish the Project Site. The issuance of any Notice to Proceed following the Effective Date will be deemed to grant the Design-Builder a license to access the Project Site to the extent necessary to perform the Work authorized by the Notice to Proceed, subject to the terms and conditions of the Contract Documents.

2.3.2 Design-Builder shall confine operations at the Project Site to those areas permitted by Applicable Law and the Contract Documents, and shall not unreasonably encumber the Project Site with materials or equipment.

2.3.3 Design-Builder shall be responsible for laying out the Work and shall protect and preserve any reference points and property monuments designated by the City, and shall make no changes or relocations without the prior written approval of the Project Director. Design-Builder shall report to the Project Director whenever any reference point or property monument is destroyed or requires relocation because of necessary changes in grades or locations, and shall be responsible for the accurate replacement or relocation of such reference points or property monuments by appropriately licensed and qualified professional personnel.

2.3.4 Design-Builder shall be responsible for obtaining any property rights to lands in addition to the Project Site that may be necessary for temporary construction facilities or storage of

2.4 City-Designed Governmental Approvals

2.4.1 The City shall be responsible for obtaining the City-Designated Governmental Approvals. Design-Builder shall: (a) cooperate with and assist the City in obtaining the City-Designated Governmental Approvals; and (b) provide the City and all appropriate Governmental Authorities with all data, information, plans and specifications in its possession or control (including all information specific to the Work that may exist or be required by the Governmental Authorities to be developed by Design-Builder) that may be required in order to properly apply for, obtain and maintain the City-Designated Governmental Approvals.

2.4.2 The City will provide reasonable assistance to Design-Builder in connection with Design-Builder's obligation to obtain and maintain all other Governmental Approvals, including signing permit applications, attending public hearings and meetings of the Governmental Authorities charged with issuing the Governmental Approvals, and providing Design-Builder with existing relevant data and documents that are within the City's custody or control or are reasonably obtainable by the City and which are reasonably required for such purpose; provided, however, that the City's obligation to provide such reasonable assistance will be limited, in light of Design-Builder's primary role in the permitting and development of the Project, only to those actions which are legally required to be taken by the City as permittee or co-permittee or which involve providing information which is in the possession of or reasonably obtainable by the City. Any such assistance will be provided only upon the reasonable request of Design-Builder made directly to the Project Director, and the City will have no affirmative obligation independently to initiate or to provide such assistance. This covenant will not obligate the City to staff Design-Builder's permitting or development efforts, to undertake any new studies or investigations with respect to the Project, or to affirmatively seek to obtain the issuance of the Governmental Approvals other than the City-Designated Governmental Approvals.

2.5 City's Right to stop the work

2.5.1 The City may, with or without cause, through a written notice executed by the Project Director, order Design-Builder to suspend, delay or interrupt all or any part of the Work. Design-Builder will have no entitlement to a Claim for relief or any adjustment to

the Contract Compensation or Contract Times under circumstances of the City ordering the Design-Builder to suspend, delay or interrupt all or any part of the Work due to Design-Builder Fault. However, if the City orders the Design-Builder to suspend, delay or interrupt all or any part of the Work under circumstances other than Design-Builder Fault, the Design-Builder will be entitled to a Change Order providing for an appropriate adjustment to the Contract Times and Contract Compensation, as and to the extent provided in Article 7 and Article 8.

2.6 City's Right to Reject Work

2.6.1 City shall have the right to reject Work that does not conform to the Contract Standards and to issue Notices of Noncompliance. City shall also have the right to require special inspection or testing of the Work, whether or not such Work is then fabricated, installed, or completed. Neither City's right to act under this Section nor any decision by City either to exercise or not to exercise such right shall give rise to any duty or responsibility of City to Design-Builder or to any other Person, or result in a waiver of any of City's rights or relieve Design-Builder of its obligations.

2.7 City's Right to Carry out Work

2.7.1 If Design-Builder fails to carry out Work in accordance with the Contract Standards, and fails within the period established in a Notice of Noncompliance to correct the nonconforming Work, City may, after expiration of the period specified in the Notice of Noncompliance, correct or provide for the correction of the deficiencies without prejudice to other remedies City may have, including the rights of City under Section 12.1. The City has no obligation hereunder to identify, correct or provide for the correction of any deficiency

2.7.2 If the City corrects or provides for the correction of deficiencies pursuant to Section 2.7.1, Design-Builder shall pay the City all costs and expenses reasonably incurred by the City in connection therewith, including costs of other design consultants and any other additional services and expenses made necessary by the deficiency. The City shall have the right to deduct the amount of any payment required from the Design-Builder under this Section from any payment then or thereafter due Design-Builder; provided that if payments then or thereafter due Design-Builder are not sufficient to cover the amount required to be paid by Design-Builder, Design-Builder shall pay the difference to City. Corrective action by the City under Section 2.7.1 and amounts charged to Design-Builder are both subject to prior approval of the Project Director.

2.7.3 Notwithstanding City's right to carry out Work, maintenance and protection of the Work remains Design-Builder's responsibility, as provided in the Contract Documents.

Article 3 – Design Builder

3.1 General Responsibilities

3.1.1 Design-Builder shall maintain an office with agent for service of process in the greater City of Houston area during Design-Builder's performance under this Agreement. Design-Builder shall file its street address with the Project Director. Design-Builder may use the job site office of Design-Builder to meet this requirement.

3.1.2 Design-Builder and Design-Builder's employees shall not give or lend money or anything of value to any officer or employee of City. Should this Paragraph 3.1.2 be violated, the Project Director may terminate this Agreement under Section 12.1.

3.1.3 Design-Builder shall provide for the overall management of all DB-Related Entities in accordance with the Contract Standards. The Design-Builder shall prepare, provide, update and maintain a management plan for the Project (the "Project Management Plan") in accordance with the Contract Standards, including all requirements specified in Exhibit B, and shall comply with the Project Management Plan in performing all Work. The Design-Builder shall comply with the Work management system requirements of the Contract Documents for the documenting, sharing and control of Project information.

3.1.4 Design-Builder shall prepare, provide, update and maintain the Project Schedule in accordance with the Contract Standards, including all requirements specified in Exhibit B and Exhibit G. No update of the Project Schedule may change the Contract Times absent execution of a Change Order authorizing a change in the Contract Times.

3.1.5 Design-Builder shall submit to the Project Director written monthly progress reports ("Progress Reports"). Progress Reports shall be submitted to the Project Director with each Application for Payment on forms approved by Project Director. Progress Reports shall include an updated Project Schedule and all other information required by the Contract Documents.

3.1.6 The Design-Builder agrees that Design-Builder's submission of the Progress Report, including any update to the Project Schedule, is for the City's information only and shall not limit or otherwise affect the Design-Builder's obligations under the Contract Documents. The Project

Director's acceptance of the Progress Report, including any update to the Project Schedule, shall not bind the City in any manner and shall not imply City approval or consent to any of the matters set forth therein.

3.1.7 Title to the structures, improvements, fixtures, machinery, equipment and materials constituting the Project Facilities shall pass to the City free and clear of all Encumbrances upon the earlier of: (a) payment therefor by the City, (b) incorporation in the Project Facilities, or (c) upon any termination of this Agreement. Except to the extent provided in Section 3.16, however, and except under circumstance of transfer of title upon termination of this Agreement, the Design-Builder shall bear all risk of loss concerning the structures, improvements, fixtures, machinery, equipment and materials included in any particular Phase of the Work until the date of City occupancy of the associated Project Facilities following Substantial Completion (such date to be specified in the Certificate of Substantial Completion for such Phase), regardless of the extent to which the loss was insured or the availability of insurance proceeds. The procedures set forth in Section 3.16 shall be applicable in the event of any damage to, loss or the destruction of the Work at the Project Site. Notwithstanding Section 3.16 or any other provision of the Contract Documents, the Design-Builder shall bear all risk of loss concerning any structures, improvements, fixtures, machinery, equipment or materials required for the Work and stored at any location other than the Project Site, regardless of whether the City has paid for any such structures, improvements, fixtures, machinery, equipment or materials.

3.1.8 Design-Builder shall not directly or indirectly create or permit to be created or to remain, and shall promptly discharge or bond any Encumbrance or Lien arising in relation to the Project Facilities or the Work. All Subcontracts shall provide that the sole recourse for non-payment shall be against the Payment Bond.

3.1.9 Design-Builder shall provide the Project Director, promptly following the receipt thereof, copies of any notice of default, breach or non-compliance received under or in connection with any Governmental Approval, Subcontract or other agreement pertaining to the Project.

3.1.10 Without limiting any other requirement of the Contract Documents, any certification or report delivered by Design-Builder to City and pertaining to Acceptance Testing, Substantial Completion or Final Completion shall be accompanied by a signed and sealed certificate of the Engineer-of-Record affirming the accuracy thereof to the best of his or her knowledge. Design-Builder shall provide for a signed

and sealed certificate of the Engineer-of-Record for other documents or communications relating to the performance of the Work, as reasonably requested by the Project Director. The form of certification required shall comply with all requirements of Applicable Law.

3.2 Governmental Approvals

3.2.1 Except as provided in Section 2.4, Design-Builder shall prepare all filings, applications and reports and take all other action necessary to obtain and maintain, and shall obtain and maintain, all Governmental Approvals necessary to commence, continue and complete the Work in accordance with the Contract Standards. Where required under Applicable Law or requested by the City, Governmental Approvals shall be obtained in the name of the City, and in connection therewith, Design-Builder shall: (a) prepare the application and develop and furnish all data and information which may be required; (c) familiarize itself with the terms and conditions thereof; (d) attend all required meetings and hearings; and (e) take all other action necessary in obtaining, maintaining, renewing, extending and complying with the terms thereof.

3.2.2 The Project Director or any designee may attend meetings between Design-Builder and any Governmental Authority. Design-Builder shall:

- (a) notify the Project Director prior to any application, or other communication with any Governmental Authority regarding Governmental Approvals.
- (b) keep the Project Director fully informed of the details of all discussions and negotiations with Governmental Authorities with respect to all Governmental Approvals for which it is responsible;
- (c) provide the Project Director with copies of all documentation and correspondence with a Governmental Authority relating to such Governmental Approvals; and
- (d) provide reasonable advance notice to the Project Director of any meetings with any Governmental Authority.

3.2.3 Design-Builder shall not knowingly take any action in any application, data submittal or other communication with any Governmental Authority regarding Governmental Approvals or the terms and conditions thereof that would impose any unreasonable cost or unreasonable burden on the City or that would materially contravene any City policies provided or otherwise available to Design-Builder with respect to the matters contained therein. The City reserves the right to modify, alter, amend,

delete or supplement any information supplied, or term or condition proposed, by Design-Builder which would have the effect described in the preceding sentence. The final terms and conditions of any Governmental Approval will be subject to the City's approval, acting reasonably. Design-Builder shall deliver to the City, promptly after Design-Builder's receipt, a copy of each Governmental Approval, and shall provide a listing of the status of all Governmental Approvals in each Progress Report.

3.2.4 Design-Builder shall:

- (a) prepare all reports, make all information submittals and provide all notices to all Governmental Authorities required by all Governmental Approvals and under Applicable Law with respect to the Project;
- (b) provide the City with copies of such regulatory reports for review, comment and signature, as applicable, at least 10 Business Days before their filing with the Governmental Authority, or concurrently with the filing in the event that Applicable Law requires an immediate filing with the Governmental Authority; and
- (c) certify to the City the accuracy and completeness of all reports, submittals, data and other information prepared by Design-Builder and proposed for filing.

3.2.5 Except as provided in Section 3.2.6 and Section 3.2.7, Design-Builder explicitly assumes the risk of obtaining and maintaining all Governmental Approvals (excluding City-Designated Governmental Approvals), including the risk of delay, non-issuance or the imposition of any term or condition in connection therewith by a Governmental Authority. In assuming this risk, Design-Builder acknowledges that the delay or non-issuance of any Governmental Approval required for the commencement or continuance of Construction or performance of the Acceptance Test may have the effect of compressing the period within which the Work must be completed under this Agreement in order to achieve the Contract Times and avoid liquidated damages or termination. Design-Builder further acknowledges that the Governmental Authority, in issuing any Governmental Approval (excluding City-Designated Governmental Approvals), may impose terms and conditions which require Design-Builder to make changes or additions to the Work, which may increase the cost, time or risk to Design-Builder of performing the Work, all of which costs, delays or risks will be for the account of and borne by Design-Builder, except as specifically provided below.

3.2.6 If in seeking to obtain a Governmental Approval identified in Exhibit G, (a) the Design-Builder has complied with the requirements of this Agreement; (b) the Design-Builder has submitted all applications, data, studies, reports, responses and other information required under Applicable Law and the adopted administrative practice of the Governmental Authority in order to obtain the Governmental Approval; (c) the Design-Builder has in all respects used its best efforts to obtain the Governmental Approval; (d) the Design-Builder has consistently maintained a fully responsive, engaged and respectful professional relationship with the staff and management of the Governmental Authority in a manner that, while not expressly required under Applicable Law, is generally recognized among regular practitioners in the permitting field as necessary on a practical level to secure similar permits in a timely manner in light of the discretion accorded Governmental Authorities under administrative law; and (e) there has been a failure to issue the Governmental Approval by the "Assumed Approval Issuance Date" set forth in Exhibit G, then the Design-Builder shall be entitled to Uncontrollable Circumstance relief associated with the delay as and to the extent provided in Articles 7 and 8.

3.2.7 The Design-Builder shall be entitled to claim Uncontrollable Circumstance relief in accordance with and to the extent provided in Articles 7 and 8 in the event of a failure of a Governmental Authority to comply with Applicable Law: (a) in connection with a Governmental Approval application, or (b) with respect to the imposition of arbitrary and capricious terms and conditions in connection with a Governmental Approval.

3.3 Compliance with Applicable Law

3.3.1 Design-Builder shall, and shall cause all DB-Related Entities to, undertake and perform the Work in accordance with Applicable Law and all other applicable Contract Standards, so that all elements of the Work, including all Design Professional and the Services procurement thereof, workmanship, all construction equipment and materials, and the furnishing, installation and commissioning of equipment and materials, meet or exceed the requirements of Applicable Law. Design-Builder shall provide all notices required by Applicable Law. The incorporation, reference or citation of specific statutes or other parts of Applicable Law in the Contract Documents is not intended, nor will it be construed, to limit the generality of Design-Builder's obligations to comply, or to cause all DB-Related Entities to comply, with Applicable Law (whether or not specifically incorporated or referenced in the Contract Documents).

3.3.2 Design-Builder's obligations under Section 3.3.1 include the obligation to comply with all conditions and requirements of the Governmental Approvals, including the City-Designated Governmental Approvals. Design-Builder shall report to the Project Director, immediately upon obtaining knowledge thereof, all violations of the terms and conditions of any Governmental Approval or Applicable Law pertaining to the Project. The City shall have the right to enforce compliance with the terms and conditions of any Governmental Approval as if such terms and conditions were direct obligations of Design-Builder under the Contract Documents. Any violations of or noncompliance with any Governmental Approval, including Governmental Approval suspensions caused by DB-Related Entities, will be the sole risk and responsibility of Design-Builder, and will not be a basis for a Claim for relief or any adjustment to the Contract Compensation or Contract Times.

3.3.3 In the event that Design-Builder or any DB-Related Entity fails at any time to comply with Applicable Law with respect to the Project, Design-Builder shall, without limiting any other obligation under this Agreement:

- (a) respond to any notice of non-compliance, warning letter, notice of violation or other enforcement action and seek amicable resolution of the issues;
- (b) immediately investigate and correct such failure and resume compliance with Applicable Law;
- (c) pay any resulting fines, assessments, levies, impositions, penalties or other charges;
- (d) be liable for all costs, delays, and damages attributable thereto, including any damage to other work or property arising from or relating to the breach or any corrective action taken by the Design-Builder;
- (e) make all changes in performing the Work which are necessary to assure that the failure of compliance with Applicable Law will not recur; and
- (f) comply with any corrective action plan filed with or mandated by any Governmental Authority in order to remedy a failure of compliance with Applicable Law.

3.3.4 Neither City nor any of its agents, representatives or consultants shall have any responsibility for monitoring Design-Builder's compliance with the requirements of this Section

3.3.5 Design-Builder shall keep the City regularly advised as to potential changes in regulatory

requirements affecting the Work of which Design-Builder has knowledge, and provide recommended responses to such potential changes so as to mitigate any possible adverse economic impact on the City should a Change in Law actually occur.

3.4 Design Professional Services

3.4.1 The Design-Builder is responsible for the development of the Baseline Design Documents as part of the Preliminary Services. Commencing on the GMP Amendment Date or, with respect to any Early Work Package, the Early Work Package Amendment Date, the Design-Builder shall have no right to relief hereunder, to make any Claim against the City, or to seek any adjustment to the Contract Compensation or the Contract Times as the result of:

1. any incomplete, inaccurate, ambiguous, or inadequate information or requirements contained in or among the Baseline Design Documents or any Contract Document;
2. the review, acceptance or approval of the Baseline Design Documents or any Contract Document by the City or any City Technical Consultant; or
3. the involvement of the City or any City Technical Consultant during the performance of the Preliminary Services.

3.4.2 The Design-Builder shall undertake, perform and complete the Design Professional Services in accordance with the Contract Standards and shall prepare all Final Design and Construction Documents necessary or appropriate to carry out the Work.

3.5 Submittals

3.5.1 Design-Builder shall submit Final Design and Construction Documents to the City in accordance with the Submittal Protocol. The City shall have the right to review and comment on all Final Design and Construction Documents for compliance with the Contract Standards and shall provide responses in accordance with the schedule established by the Submittal Protocol.

3.5.2 Design-Builder shall be fully responsible for any delays in submitting Final Design and Construction Documents to the Project Director. Except as expressly provided in the Submittal Protocol or otherwise approved at the sole discretion of the Project Director, the City shall have 30 days from the date of submittal to review and respond to any Final Design and Construction Document.

3.5.3 Design-Builder shall certify that the content of submittals conforms to the Contract Standards without

exception. By certifying and submitting Final Design and Construction Documents, Design-Builder represents that Design-Builder has determined and verified design calculations, materials, quantities, field measurements, and field construction criteria related to the submittal, and has checked and coordinated information contained within the submittals with requirements of the Contract Documents and for compatibility with other submittals.

3.5.4 Without limiting any requirement hereunder in respect of a Notice to Proceed, Design-Builder shall not, without the prior written approval of the Project Director in the Project Director's sole discretion, perform or permit any other DB-Related Entity to perform, any Construction until the Final Design and Construction Documents relating to such Construction and required to be submitted to the City under the Submittal Protocol have been reviewed and accepted by the City in accordance with the Submittal Protocol.

3.5.5 Design-Builder acknowledges and agrees that the City's review and acceptance of any Final Design and Construction Document will not serve to transfer any responsibility or liability for the Design Professional Services or the Construction from the Design-Builder to the City or otherwise relieve Design-Builder from any obligation hereunder. Nothing in this Agreement will be interpreted as giving any responsibility for the Design Professional Services to the City, the City Technical Consultants or any other City representative or consultant.

3.6 Supervision and Construction Procedures

3.6.1 Design-Builder shall supervise, direct, and inspect the Work competently and efficiently, devoting the attention and applying the skills and expertise as necessary to perform the Work in accordance with the Contract Standards. Design-Builder is solely responsible for and has control over the means, methods, techniques, sequences, and procedures of Construction, including safety precautions and programs and the coordination of the various elements of the Work.

3.6.2 Regardless of observations or inspections by City or City's consultants, Design-Builder shall perform and complete the Work in accordance with the Contract Standards. Nothing in this Agreement will be interpreted as giving any responsibility for the Construction to the City, the City Technical Consultants or any other City representative or consultant.

3.6.3 Prior to commencing any trenching or excavations, Design-Builder shall conduct investigations in accordance with the Contract Standards, including exploratory excavations, to

determine the location and type of Underground Facilities that could be damaged as a result of the excavations. Design-Builder shall carefully sustain in their places and support, or if necessary relocate, all Underground Facilities located within or adjacent to the Project Site and as required by the party owning or controlling such facilities. Before proceeding with the work of sustaining, supporting or relocating any such facilities, Design-Builder shall satisfy the Project Director that the methods and procedures to be used have been approved by the party owning same.

3.7 Superintendent

3.7.1 Design-Builder shall employ a competent Superintendent and necessary assistants who shall be present at the Project Site during performance of the Work. Any notices or communications given to Superintendent will be deemed given to the Design-Builder. Notices or communications received by the City from the Superintendent shall be binding on the Design-Builder. The Superintendent shall, without limitation: (a) be familiar with the Work and all requirements of the Contract Documents; (b) coordinate the Work and give the Work regular and careful attention and supervision; (c) maintain a daily status log of the Work; and (d) attend all monthly progress meetings and other meetings concerning the performance of the Work with the City and its representatives.

3.7.2 Design-Builder shall notify the Project Director in writing of its intent to replace the Superintendent. Design-Builder shall not replace the Superintendent if the Project Director makes a reasonable objection in writing or if such replacement would otherwise violate the "key personnel" provisions of this Agreement.

3.8 Labor

3.8.1 Design-Builder shall provide competent, suitably qualified personnel to perform the Work in accordance with the Contract Standards. Design-Builder shall enforce discipline and good order at all times among all personnel, including all employees of Design-Builder and any other DB-Related Entity. Design-Builder shall ensure that all Persons engaged by Design-Builder for the performance of Work have the requisite skills for the tasks assigned and comply with all registration, licensing and certification requirements under Applicable Law. City may, by written notice, require Design-Builder to remove from the Work any employee of Design-Builder or any other DB-Related Entity to whom the Project Director makes reasonable objection.

3.8.2 Design-Builder shall comply with the applicable Business Enterprise Policy set out in this Agreement.

3.8.2.1 Design-Builder shall make "good faith efforts" to award Subcontracts in at least the percentages set out in the Business Enterprise Policy. Design-Builder acknowledges that it has reviewed the requirements for "good faith efforts" on file with the City's Mayor's Office of Business Opportunity and shall comply with them.

3.8.2.2 Design-Builder shall require written Subcontracts with Business Enterprises and may submit disputes with Business Enterprises to voluntary mediation to be conducted in Houston, Texas. Business Enterprise Subcontracts complying with City Code of Ordinances Chapter 15, Article II must contain the terms set out in Subparagraph 3.8.3.

3.8.3 The requirements and terms of the City of Houston Pay or Play Program, as set out in Executive Order 1-7 and Ordinance 2007-0534, are incorporated into this Agreement for all purposes. Design-Builder shall comply with the terms and conditions of the Pay or Play Program as they are amended from time-to-time. IF DESIGN-BUILDER DOES NOT PAY IN ACCORDANCE WITH THE PAY OR PLAY PROGRAM WITHIN 30 DAYS OF THE DATE PROJECT DIRECTOR SENDS DESIGN-BUILDER WRITTEN NOTIFICATION, CITY CONTROLLER MAY DEDUCT FUNDS UP TO THE AMOUNT OWED FROM ANY PAYMENTS OWED TO DESIGN-BUILDER UNDER THIS AGREEMENT, AND DESIGN-BUILDER WAIVES ANY RECOURSE.

3.9 Prevailing Wage Rates

3.9.1 Design-Builder shall comply with governing statutes providing for labor classification of wage scales for each craft or type of laborer, worker, or mechanic.

3.9.1.1 Prevailing wage rates applicable to the Work shall be as stated in the Contract Documents.

3.9.2 Prevailing wage rates applicable to the Work may be one or the other of the following wage rates (Federal or City) identified in the Contract Documents:

- (a) Federal Wage Rate General Decisions
- (b) Highway Rates
- (c) Building Rates
- (d) Heavy Construction Rates
- (e) Residential Rates
- (f) City Prevailing Wage Rates
- (g) Building Construction Rates
- (h) Engineering Construction Rates

(i) Asbestos Worker Rates

3.9.2 Each week Design-Builder shall submit to Mayor's Office of Business Opportunity certified copies of payrolls showing classifications and wages paid by Design-Builder, Subcontractors, and Suppliers for each employee under this Agreement, for any day included in this Agreement.

3.10 Labor Conditions

3.10.1 Design-Builder shall furnish labor that can work in harmony with all other elements of labor employed for the performance of the Work. Design-Builder shall have exclusive responsibility for disputes or jurisdictional issues among unions or trade organizations representing employees of the Design-Builder or any other DB-Related Entity, whether pertaining to organization of the Work, arrangement or subdivision of the Final Design and Construction Documents, employee hiring, or any other matters. The City shall have no responsibility whatsoever for any such disputes or issues.

3.10.2 In the event of labor disputes affecting Design-Builder or any other DB-Related Entity, Design-Builder shall utilize all reasonable means to resolve disputes in order that the Work not be delayed to any extent. These means will include seeking injunctive relief and filing unfair labor practice charges, and any other action available to Design-Builder.

3.10.3 Design-Builder shall notify Project Director immediately upon obtaining knowledge that any actual or potential labor dispute is delaying or is threatening to delay timely performance of the Work, and shall keep Project Director regularly informed as to Design-Builder's efforts to resolve the dispute. Design-Builder shall not be entitled to, and shall not seek any Claim for, relief or adjustment to the Contract Compensation or Contract Times due to labor disputes involving employees of Design-Builder or any other DB-Related Entity.

3.11 Drug Detection and Deterrence

3.11.1 It is the policy of City to achieve a drug-free work force and to provide a workplace that is free from the use of illegal drugs and alcohol. It is also the policy of City that manufacture, distribution, dispensation, possession, sale, or use of illegal drugs or alcohol by contractors while on City's premises is prohibited. By executing the Agreement, Design-Builder represents and certifies that it meets and will comply with all requirements and procedures set forth in the Mayor's Policy on Drug Detection and Deterrence, City Council Motion No. 92-1971 ("Mayor's Policy") and the Mayor's Drug Detection and Deterrence Procedures for Contractors, Executive Order No. 1-31, (Revised) ("Executive Order").

Mayor's Policy is on file in the office of City Secretary. Copies of Executive Order may be obtained at the location specified in the Request for Proposals.

3.11.1.1 The Executive Order applies to City's contracts for labor or services except the following:

- (a) contracts authorized by Emergency Purchase Orders,
- (b) contracts in which imposition of requirements of the Executive Order would exclude all potential bidders or proposers, or would eliminate meaningful competition for the Contract,
- (c) contracts with companies that have fewer than 15 employees during any 20-week period during a calendar year and no safety impact positions,
- (d) contracts with non-profit organizations providing services at no cost or reduced cost to the public, and
- (e) contracts with federal, state, or local governmental entities.

3.11.1.2 Prior to execution of the Agreement, Design-Builder shall have filed with City:

- (a) a Drug Policy Compliance Agreement form (Attachment "A" to the Executive Order), and
- (b) a copy of Design-Builder's drug free workplace policy, and
- (c) a written designation of all safety impact positions, if applicable, or a Design-Builder's Certification of a No Safety Impact Positions form (Attachment "C" to the Executive Order).

3.11.1.3 Every six months during performance of this Agreement and upon completion of the Work, Design-Builder shall file a Drug Policy Compliance Declaration form (Attachment "B" to the Executive Order). The Design-Builder shall submit the Drug Policy Compliance Declaration within 30 days of expiration of each six-month period of performance and within 30 days of the Date of Final Completion. The first six-month period shall begin on Date of Commencement of the Work.

3.11.1.4 Design-Builder shall have a continuing obligation to file updated designation of safety impact positions when additional safety impact positions are added to Design-Builder's employee workforce during performance of the Work.

3.11.1.5 Design-Builder shall require its Subcontractors and Suppliers to comply with the Mayor's Policy and Executive Order. Design-Builder is responsible for securing and maintaining required

documents from Subcontractors and Suppliers for City inspection throughout the term of this Agreement.

3.11.1.6 Failure of Design-Builder to comply with requirements will be a material breach of this Agreement entitling City to terminate in accordance with Section 12.1.

3.12 Materials and Equipment

3.12.1 Except as specifically provided in the Contract Documents, Design-Builder shall provide or cause to be provided and assume full responsibility for services, materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, sanitary facilities, transportation, temporary facilities, supplies, and other facilities and incidentals necessary for performing, testing, starting-up, and completing the Work.

3.12.1.1 Design-Builder and all other DB-Related Entities shall use Ultra Low Sulfur Diesel Fuel in all diesel operating vehicles and motorized equipment utilized in performing the Work. Ultra Low Sulfur Diesel Fuel is defined as diesel fuel having 15 ppm or the applicable standard set by state or federal law or rules and regulations of the Texas Commission on Environmental Quality, or the Environmental Protection Agency, whichever is less, in sulfur content. Off-road Ultra Low Sulfur Diesel Fuel may be used in lieu of on-road Ultra Low Sulfur Diesel Fuel. Design-Builder shall provide, upon request by the Project Director, proof that Design-Builder and all other DB-Related Entities are using Ultra Low Sulfur Diesel Fuel.

3.12.2 All materials, equipment systems and supplies incorporated into the Work shall be:

- (a) as specified in the Contract Documents; and
- (b) if not so specified, new and of good quality consistent with the Contract Standards.

If required by the Project Director, Design-Builder shall furnish satisfactory evidence, including reports of required tests, as to kind and quality of materials, equipment systems or supplies.

3.12.3 Design-Builder shall be fully responsible for the procurement, ordering, transit, delivery, storage, protection, furnishing, installation and commissioning of all materials, equipment and supplies in accordance with the Contract Standards. Without limitation, Design-Builder shall:

- (a) be responsible for making all necessary arrangements for the procurement, ordering, packaging, shipment, transit, importation,

storage and delivery of all materials, equipment and supplies to the Project Site;

- (b) be responsible for taking receipt of all deliveries of materials, equipment and supplies and will inspect, test, investigate, and confirm acceptance or rejection of all deliveries of materials, equipment and supplies;
- (c) be responsible for the preparation, assembly and incorporation of the materials, equipment and supplies, and where applicable their installation into the Project Facilities, including their commissioning in accordance with the Contract Standards; and
- (d) store materials, equipment and supplies in a safe, neat, compact, and protected manner, so as to cause the least inconvenience to property owners, tenants, and general public and so as not to block access to, or be closer than, three feet to any fire hydrant.

3.12.3.1 Design-Builder shall obtain Project Director's approval for storage areas used for materials, equipment and supplies for which payment has been requested under Section 9.2.2. Design-Builder shall provide City access to the storage areas for inspection purposes. Materials, equipment and supplies become the property of City in accordance with Section 3.1.7 and may not be removed from place of storage, without the Project Director's written permission except for a movement to the Project Site. Design-Builder's Installation Floater, required under the Required Insurance, shall cover all perils, including loss or damage to materials, equipment and supplies during storage, loading, unloading, and transit to the site.

3.13 Taxes

3.13.1 Design-Builder shall pay all Taxes, including applicable sales, consumer, use, and similar taxes, which are assessed or incurred in connection with the Work and with respect to which any sales or use tax exemption is not applicable.

3.13.2 Design-Builder shall obtain, and require all other DB-Related Entities to obtain, necessary permits from applicable state and local taxing authorities to perform contractual obligations under this Agreement, including sales tax permits (to the extent any sales or use tax exemption is not applicable).

3.13.3 City is exempt from the Federal Transportation and Excise Tax. Design-Builder shall comply with federal regulations governing the exemptions.

3.13.4 Certain materials and equipment incorporated into the Work are exempt from state sales tax

according to provisions of the Tex. Tax Code Ann. Ch. 151, Subsection H.

3.13.5 It is Design-Builder's responsibility to claim exemption from payment of taxes where exemption is applicable by complying with such procedures as may be prescribed by Applicable Law.

3.14 Safety and Precautions

3.14.1 Design-Builder is responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with performance of the Work. Design-Builder shall submit a safety program to Project Director prior to mobilizing for the Work, and is solely responsible for safety, efficiency, and adequacy of ways, means, and methods, and for all loss, injury, or damage which might result from failure or improper construction, maintenance, or operation performed by Design-Builder. City shall have the right to review and comment on Design-Builder's safety program, and Design-Builder shall not commence performance of Work at the Project Site until all City comments have been resolved.

3.14.2 Design-Builder shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury or loss to:

- (a) all employees on the Project Site and all other Persons who may be affected thereby;
- (b) all Work, whether in storage on or off the Project Site; and
- (c) other property at the Project Site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures and utilities not designated for removal, relocation or replacement in the course of Construction.

3.14.3 Design-Builder is solely responsible to inspect, survey, and assess the Project Site and identify the existence of all permit-required confined spaces and non-permit confined spaces. Design-Builder's Project Site safety assessment shall begin prior to initiation of Construction and continue throughout the duration of the Work in accordance with the Contract Standards.

3.14.4 Design-Builder's obligation to comply with Applicable Law includes the obligation to give notices and comply with all Applicable Law bearing on safety of persons, property, or environment, including:

- (a) requirements of Underground Facility Damage Prevention and Safety Act TEX. UTIL. CODE ANN. Ch. 251 (Vernon Supp. 2002); and
- (b) all safety rules and regulations of the Federal Occupational Health and Safety Act of 1970 and subsequent amendments (OSHA).

3.14.5 Design-Builder shall erect and maintain, as required by existing conditions and performance of the Work, reasonable safeguards for safety and protection of persons and property, including posting danger signs and other warnings against hazards, promulgating safety regulations, and notifying owners and users of adjacent sites and utilities.

3.14.6 The Design-Builder shall, prior to commencing Construction, designate an individual with the qualifications and experience necessary under Good Engineering and Construction Practice to supervise the implementation and monitoring of all safety precautions and programs related to the Work (the "Safety Representative"). The Safety Representative shall be an individual stationed at the Project Site who shall have no other responsibilities with respect to the Project other than supervising the implementation and monitoring of all safety precautions and programs related to the Work. The Safety Representative shall make routine daily inspections of the Project Site and shall hold weekly safety meetings with the Design-Builder's personnel, Subcontractors and others as applicable. The Design-Builder shall provide minutes of each safety meeting to the City within five days of such meeting.

3.14.7 Design-Builder shall utilize best efforts to prevent windblown dust and shall not burn or bury trash debris or waste products on-site or use sewers for disposal of trash or debris. Design-Builder shall prevent unlawful and other environmental pollution, including particulates, gases and noise, as a result of the Work.

3.14.8 When use or storage of hazardous materials or equipment, or unusual methods are necessary for execution of the Work, Design-Builder shall exercise utmost care in accordance with the Contract Standards and carry on the activities under supervision of properly qualified personnel.

3.14.9 Design-Builder shall promptly remedy all damage and loss to property referred to in Section 3.14.2(b) and 3.14.2(c), caused, directly or indirectly, in whole or in part, by any DB-Related Entity. Any damage to the Work shall be remedied in accordance with Section 3.16. Design-Builder shall promptly repair or replace all private or public property (other than Work) damaged by any DB-Related Entity to restore the damaged property, to the maximum extent reasonably practicable, to its character and condition existing immediately prior to the damage. Nothing in this Section is intended to waive any rights of recovery under applicable policies of insurance.

3.15 Emergencies

3.15.1 In case of an emergency which threatens immediate loss or damage to property or safety of life, Design-Builder shall act, at its discretion and risk, to prevent threatened loss, damage, injury or death. Design-Builder shall notify City of the situation and all actions taken immediately thereafter. If, in the opinion of Design-Builder, immediate action is not required, Design-Builder shall notify City of the emergency situation and proceed in accordance with City's instructions. However, if any loss, damage, injury or death occurs that could have been prevented by Design-Builder's prompt and immediate action, Design-Builder shall be fully liable for all costs, damages, claims, actions, suits, attorneys' fees and all other expenses arising therefrom or relating thereto.

3.16 Restoration

3.16.1 In case of damage to the Work, and regardless of the extent thereof or the estimated cost of restoration, and whether or not any insurance proceeds are sufficient or available for the purpose, Design-Builder shall, unless otherwise directed in writing by the Project Director, promptly undertake and complete restoration of the damage to the Work to the character and condition existing immediately prior to the damage and in accordance with the procedures set forth herein, as applicable, regarding Uncontrollable Circumstances, Change Orders and Work Change Directives. If Design-Builder fails to undertake restoration of the damage, or having so commenced fails to complete restoration in accordance with this Agreement, City may (but shall not be obligated to) undertake or complete restoration at the Design-Builder's expense to the extent Design-Builder is responsible for costs under Section 3.16.3. City shall provide Design-Builder with seven days' advance written notice prior to exercising its right to undertake or complete restoration pursuant to this Section. Notwithstanding any of the foregoing, to the extent that Uncontrollable Circumstances cause damage to the Work and insurance proceeds or other third-party payments are not sufficiently available to pay for restoration work pursuant to this Section, Design-Builder's obligation to perform such restoration work shall be subject to the receipt of reasonable assurances from City of its ability to pay the costs for which it is financially responsible under this Section. Any restoration work under this Section shall constitute Work hereunder.

3.16.2 To the extent that any repair, replacement or restoration costs incurred pursuant to Section

3.16.1 can be recovered from any insurer or from another third party, each Party shall assist the other in

exercising such rights as it may have to effectuate such recovery. Each Party shall provide the other with copies of all relevant documentation, and shall cooperate with and assist the other Party upon request by participating in conferences, negotiations and litigation regarding insurance claims; provided, however, that neither Party shall be obligated pursuant to this Section to provide the other Party with documents subject to the attorney-client privilege under the laws of the State of Texas.

3.16.2 To the extent that any repair, replacement or restoration costs incurred pursuant to Section

3.16.1 can be recovered from any insurer or from another third party, each Party shall assist the other in exercising such rights as it may have to effectuate such recovery. Each Party shall provide the other with copies of all relevant documentation, and shall cooperate with and assist the other Party upon request by participating in conferences, negotiations and litigation regarding insurance claims; provided, however, that neither Party shall be obligated pursuant to this Section to provide the other Party with documents subject to the attorney-client privilege under the laws of the State of Texas.

3.16.3 Subject to Section 3.16.4, all insurance proceeds and recoveries from third parties resulting from damage to or the loss or destruction of the Work, including proceeds from all policies of Required Insurance, shall be for the account of City. City shall pay the Design-Builder for restoration work required pursuant to Section 3.16.1 with such insurance proceeds and recoveries and, to the extent City bears the cost responsibility pursuant to this Section, such other funds in accordance with the Change Order and payment provisions of these General Conditions, subject to the limit of appropriation provision of this Agreement. All costs not covered by insurance proceeds or third-party payments shall be borne by Design-Builder to the extent the loss, damage or destruction was caused by Design-Builder Fault or to the extent insurance proceeds are not available due to a failure of Design-Builder to obtain or maintain any applicable policy of Required Insurance.

3.16.4 Notwithstanding Section 3.16.3, insurance proceeds that are intended to cover the insurable interests of any DB-Related Entity (excluding insurance proceeds intended to cover restoration work required pursuant to Section 3.16.1) shall be for the account of, and distributed by, the Design-Builder as fiduciary for the insureds. Any determination by the Design-Builder that insurance proceeds are intended to cover insurable interests of a DB-Related Entity and thus not subject to Section 3.16.3 shall be subject to the approval of the Project Director, which approval shall not be unreasonably withheld.

3.17 Pollutants and Pollutant Facilities

3.17.1 If Design-Builder encounters material on-site that it reasonably believes to be a Pollutant or facilities that it reasonably believes to be a Pollutant Facility, Design-Builder shall immediately stop work in affected area and immediately notify Project Director, confirming the notice thereafter in writing.

3.17.2 If the Project Director determines that the material is a Pollutant or facility is a Pollutant Facility in such circumstances or quantities that may present an imminent or substantial safety or health hazard for City, any DB-Related Entity, their respective employees, agents or representatives, the general public, or the surrounding environment, Work in affected area may not be resumed except by Modification, and only if the resumption of Work would not violate Applicable Law. To the extent the existence of a Pollutant or Pollutant Facility causes or is reasonably expected to cause an increase in the cost or time required for performance of the Work, Design-Builder shall be entitled to a Change Order providing equitable adjustment of the Contract Compensation or Contract Time, or both, in accordance with Articles 7 and 8.

3.17.3 If Project Director determines that the material is not a Pollutant or a facility is not a Pollutant Facility in the circumstances or quantities described in Section 3.17.2, Work in affected area will be resumed upon receipt of written notification from the Project Director, subject to Design-Builder's right to dispute Project Director's determination under Sections 4.4 and 4.5.

3.17.4 Design-Builder is not required to perform, unless authorized by Modification, work relating to Pollutants or Pollutant Facilities except for that Work relating to Pollutants or Pollutant Facilities specified in the Contract Documents. The Design-Builder acknowledges and agrees that the City has the right (but not the obligation) to direct Design-Builder to perform work relating to Pollutants or Pollutant Facilities by Modification. Without limiting any Design-Builder responsibility under Section 3.17.6 and except as otherwise provided in this Section 3.17.4, to the extent Design-Builder is required to remediate Pollutants at the Project Site pursuant to this Section 3.17.4, the City, as between City and Design-Builder, will be considered the generator and arranger of such Pollutants with the responsibility to sign manifests required under Applicable Law to the extent necessary to enable Design-Builder to fulfill such obligations. Nothing in this Section 3.17.4 will be construed to require the City to issue any Modification with respect to, or otherwise accept any responsibility for, any Pollutant, Pollutant Facility or condition for

which Design-Builder bears full responsibility under Section 3.17.6.

3.17.5 During the period of any investigation and remediation efforts, the Design-Builder shall take all necessary measures to isolate and contain such Pollutants or Pollutant Facilities from the unaffected parts of the Work, and shall continue the Work to the maximum extent possible on unaffected parts of the Work.

3.17.6 In performing the Work, the Design-Builder shall exercise due care, in light of all relevant facts and circumstances, to avoid exacerbating any Pollutants or Pollutant Facilities after the location and existence of such condition has been disclosed to the Design-Builder or becomes actually known by the Design-Builder through physical observation. Notwithstanding anything to the contrary in this Section, the Design-Builder shall bear full responsibility for the handling, treatment, storage, removal, remediation, avoidance, or other appropriate action (if any), with respect to: (a) any Pollutant or Pollutant Facility present at, on, in or under, or migrating or emanating to or from the Project Site, that was generated by or brought or caused to be brought on the Project Site by any act or omission of any DB-Related Entity; and (b) the creation or exacerbation of any condition relating to Pollutants or Pollutant Facilities due to Design-Builder Fault or the negligence, recklessness or willful misconduct of any DB-Related Entity.

3.18 Differing Site Conditions

3.18.1 The Design-Builder is responsible for the development of the Geotechnical Baseline Report as part of the Preliminary Services. The Geotechnical Baseline Report will establish assumed baseline subsurface conditions at the Project Site, including assumed geotechnical conditions and the locations of any Underground Utilities.

3.18.2 Design-Builder shall promptly upon discovery, and before conditions are further disturbed, give a written notice to the Project Director of: (a) subsurface or latent physical conditions at the Project Site which differ materially from those indicated in the Geotechnical Baseline Report, or (b) unknown physical conditions at the Project Site, of an unusual nature, which differ materially from those ordinarily encountered and generally recognized as inherent in work of the character required herein (subject to Section 3.18.3, "Differing Site Conditions").

3.18.3 Differing Site Conditions exclude:

- (a) conditions otherwise reflected in the Contract Documents; and
- (b) conditions of which Design-Builder had actual or constructive knowledge as of the Baseline

Date, including conditions that could reasonably have been known, discovered or revealed as a result of the examinations, investigations, explorations, tests or studies of the Project Site required to be performed by Design-Builder as part of the Preliminary Services, including the development of the Geotechnical Baseline Report.

3.18.4 Design-Builder's failure to give written notice to Project Director under Section 3.18.2 within ten days after Design-Builder's first observation of the condition and before the condition is further disturbed constitutes a waiver of any Claim Design-Builder may otherwise have had concerning the condition.

3.18.5 City will investigate the Project Site conditions promptly following receipt of any notice given under Section 3.18.2. If, following such investigation, Project Director determines that conditions at the Project Site do not constitute Differing Site Conditions, Project Director will notify Design-Builder in writing, stating the reasons. If Project Director determines the conditions constitute Differing Site Conditions and cause increase or decrease in Design-Builder's cost or time required for performance of Work, Project Director will recommend an equitable adjustment to the Contract Compensation or Contract Time, or both, as provided in Articles 7 and 8. Opposition by Design-Builder to Project Director's determination must be made within 21 days after Project Director has given notice of the decision. If the Parties cannot agree as to the existence of Differing Site Conditions or on the proposed adjustment to the Contract Compensation or Contract Time, the City Engineer will make the determination in accordance with Section 4.5.

3.19 Cultural Resources and Endangered Species

3.19.1 Design-Builder shall not remove or disturb, or cause to be removed or disturbed, any historical, archaeological, architectural, or other cultural artifacts, relics, vestiges, remains, or objects of antiquity. If Design-Builder discovers one of these items, Design-Builder shall immediately notify the Project Director and TWDB and further comply with the requirements of 13 Tex. Admin. Code Chs. 25 and 26 (2002), or successor regulation. Design-Builder shall protect site and cultural resources from further disturbance until professional examination can be made or until clearance to proceed is authorized in writing by the Project Director.

3.19.2 Should either threatened or endangered plant or animal species be encountered, Design-Builder shall cease work immediately in the area of encounter and notify the Project Director, TWDB, the U.S. Fish and Wildlife Service, and the Texas Parks and Wildlife Department. The Design-Builder shall not resume

operations in the affected area until authorized to do so by the Project Director.

3.19.3 To the extent any discovery or encounter contemplated by Section 3.19.1 or 3.19.2 causes or is reasonably expected to cause an increase in the cost or time required for performance of the Work, Design-Builder shall be entitled to a Change Order providing equitable adjustment of the Contract Compensation or Contract Time, or both, in accordance with Articles 7 and 8.

3.20 Cleaning

3.20.1 Design-Builder shall perform daily cleanup of all dirt, debris, scrap or waste materials, rubbish and other disposable items resulting from Design-Builder's operations, whether on-site or off-site. Unless otherwise authorized in writing by the Project Director, Design-Builder shall keep all streets, access streets, driveways, areas of public access, walkways, and other designated areas clean and open at all times.

3.20.2 Failure of Design-Builder to maintain a clean site, including access streets, is a basis for Project Director to issue a Notice of Noncompliance. Should compliance not be attained within the time period specified in the Notice of Noncompliance, Project Director may authorize necessary cleanup to be performed by others and Design-Builder shall be responsible for the cost of the cleanup, including through deduction from monies due Design-Builder.

3.20.3 Design-Builder shall legally dispose, off of the Project Site, all waste products and debris resulting from Design-Builder's on-site and off-site operations.

3.21 Sanitation

3.21.1 Design-Builder shall provide and maintain sanitary facilities at the Project Site for use by all personnel performing Work. Newly-constructed or existing sanitary facilities may not be used by the personnel of any DB-Related Entity.

3.22 Documents at the Project Site

3.22.1 Design-Builder shall maintain at the Project Site, and make available to City, one record copy of all Drawings, Specifications, and Modifications. Design-Builder shall maintain the documents in good order and marked currently to record changes and selections made during performance of the Work. In addition, Design-Builder shall maintain at the Project Site all other Final Design and Construction Documents and similar submittals accepted by City, which will also be available to City for reference. All documents required to be maintained under this Section, including a reproducible set of record drawings, shall be prepared in accordance with the Contract Standards and delivered to the Project

Director prior to final inspection as required in Section 9.7.4.

3.23 Access to Work and to Information

3.23.1 Design-Builder shall provide City, Inspectors, City Technical Consultants, testing laboratories, and Governmental Authorities which have jurisdictional interests, access to the Work in preparation and in progress wherever located. Design-Builder shall provide proper and safe conditions for the access. All City representatives, including any City Technical Consultant, shall comply with all reasonable safety rules and regulations applicable to presence in or upon the Project Site, as established by the Design-Builder in accordance with the Contract Standards.

3.23.2 City reserves the right to have its designated representatives, including any City Technical Consultant, witness any factory fabrication or testing. Design-Builder shall provide City with its anticipated schedule for such fabrication and testing at the initial Project meeting following the Baseline Date and shall provide 30 days advanced written notice of any provide Design-Builder with reasonable advance notice (at least 10 business days) of its intention to witness any factory fabrication or test, which notice shall indicate the identity and number of designated representatives of City who will witness the fabrication or test.

3.23.3 Design-Builder shall conduct all tests of the Work (including shop tests) or inspections required by the Contract Standards. Design-Builder shall give the Project Director reasonable advance notice (at least 10 business days) of tests or inspections required by the Contract Standards prior to the conduct thereof. In no event shall the inability, failure, or refusal of the City or any of its representatives to attend or be present at or during any such test or inspection delay the conduct of such test or inspection, delay the performance of the Work, or otherwise serve as the basis for relief from the Design-Builder's obligations hereunder. The Engineer of Record shall conduct or witness any such test or inspection to the extent required by the Contract Standards. All analyses of test samples shall be conducted by persons appearing on lists of laboratories authorized to perform such tests by the Governmental Authority having jurisdiction or, in the absence of such an authorized list in any particular case, shall be subject to the approval of the Project Director, which approval shall not be unreasonably withheld or delayed. Acceptance Testing shall be conducted in accordance with Exhibit G.

3.23.4 If required by the Project Director or the Contract Documents, Design-Builder shall furnish

information concerning character of materials and equipment, results of testing and progress and manner of the Work, including information necessary to determine cost of the Work, such as number of employees, pay of employees, and time employees worked on various classes of the Work.

3.24 Trade Secrets; Patent Fees and Royalties

3.24.1 Except as specifically provided in Section 1.3.4, Design-Builder will not make any claim of ownership of trade secrets as to materials, equipment or systems used in the Work, or preparation of any mixture for the Work. Project Director will at all times have the right to demand, and Design-Builder shall furnish information concerning, materials or samples of ingredients of any materials used, or proposed to be used, in preparation of concrete placed or other work to be done. Mixtures, once agreed on, shall not be changed in any manner without knowledge and consent of Project Director. City will make reasonable efforts to protect confidentiality of proprietary information, subject to the City's obligations under Applicable Law with respect to public records.

3.24.2 Design-Builder shall pay all license fees and royalties and assume all costs incident to the use in the performance of the Work or the incorporation in the Work of any invention, design, process, product or device which is the subject of intellectual property rights, copyrights or patents held by any other Person.

3.25 Books and Records

3.25.1 The Design-Builder shall prepare and maintain proper, accurate and complete books and records regarding the Work and all transactions related thereto, including all books of account, bills, vouchers, invoices, personnel rate sheets, cost estimates and bid computations and analyses, Subcontracts, time books, daily job diaries and reports, correspondence, and any other documents showing all acts and transactions in connection with or relating to or arising by reason of the Work, any Subcontract or any operations or transactions in which the City has or may have a financial or other material interest hereunder (collectively, "Books and Records"). The Design-Builder and an Books and Records for inspection, audit and reproduction for all such purposes, subject to Section 3.25.2. All financial records of the Design-Builder and all other DB-Related Entities shall be maintained in accordance with generally accepted accounting principles and generally accepted auditing standards. The Design-Builder and all other DB-Related Entities shall maintain such Books and Records in accordance with Section 3.25.4. The provisions of this Section shall survive termination of this Agreement.

3.25.2 All payments whatsoever by the City to the Design-Builder and all Work shall be subject to audit and examination at any time by the City. The Design-Builder shall provide the evidence necessary to substantiate charges and payments related to this Agreement and allow the City access to the Books and Records of all DB-Related Entities; provided, however, that no DB-Related Entity will be required to substantiate fixed prices once established in accordance with the Contract Documents unless there is indication of fraud, gross abuse or corrupt practices. The Design-Builder shall require all other DB-Related Entities to comply with the provisions of this Section and include the requirements hereof in each Subcontract, including all lower tier Subcontracts. In the event that the Design-Builder is a joint venture, such right to examine, copy and audit shall apply collaterally and to the same extent to the Books and Records of each individual joint venture member. The City has sole discretion as to the selection of an examiner or auditor and the scope of the examination or audit, subject to the limitations set forth in this Section.

3.25.3 Upon written notice by the City, the Design-Builder and all other DB-Related Entities shall promptly (in no event later than two weeks following the notice) make available at its office at all reasonable times the Books and Records for examination, audit, or reproduction. Notice shall be in writing, delivered by hand or by certified mail, and shall provide not fewer than five days' prior notice of the examination or audit. The City may take possession of such Books and Records by reproducing such Books and Records for off-site review or audit. When requested in the City's written notice of examination or audit, the Design-Builder shall provide the City with copies of electronic and electronically stored Books and Records in a reasonably usable format that allows the City to access and analyze all such Books and Records. For Books and Records that require proprietary software to access and analyze, the Design-Builder shall provide the City with two licenses with maintenance agreements authorizing the City to access and analyze all such Books and Records. If the Design-Builder is unable to provide the licenses, the Design-Builder shall provide the City with access to the Design-Builder's accounting system whereby the City can obtain applicable Books and Records, including job cost reports, material distribution reports, labor cost reports, labor productivity reports, standard time/overtime analysis reports, man-hour reports, and the like.

3.25.4 The Design-Builder shall preserve all of its Books and Records, and the City may examine, audit, or reproduce Books and Records in accordance with this Article, from the Effective Date until the later of four years after: (a) final payment under this Agreement; (b) final settlement of a termination for convenience hereunder; or (c) the final resolution of any dispute. The failure by the Design-Builder to make available to the City Books and Records in accordance with this Article or the Design-Builder's refusal to cooperate with a notice of audit or examination shall be deemed a material breach of this Agreement.

3.25.5 In the event an audit or examination by the City determines that the Design-Builder cannot document a cost or expense for which payment has been made, or that the City has overpaid the Design-Builder, the Design-Builder, upon demand, shall refund to the City the amounts overpaid or undocumented. If the overpayment exceeds the lesser of \$25,000 or 1% of the total amount that should have been properly paid by the City during the period audited or examined, then the Design-Builder shall, in addition, reimburse the City for any and all fees and costs incurred in connection with the examination or audit. Payments to the Design-Builder or approval by the City of any Application for Payment or Change Order, shall in no way affect the Design-Builder's obligation hereunder or the right of the City to obtain a refund of any payment to the Design-Builder which is in excess of that to which it was lawfully entitled.

3.26 Warranty

3.26.1 Design-Builder warrants to City that the Work, including all completed materials, equipment and structures comprising the Project Facilities, shall:

- (a) be new, of recent manufacture and of good quality;
- (b) conform to the requirements of this Agreement;
- (c) be free of faults or defects, including defects in title and failure of the design to meet the Contract Standards;
- (d) be suitable for its intended purposes, as established by the Acceptance Standards;
- (e) except as specifically authorized by the Contract Documents, be free of concentrations on polychlorinated biphenyl (PCB) and other substances defined as hazardous by the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) or any other Applicable Law; and
- (f) with respect to all materials, equipment and systems incorporated into the Project Facilities, has been obtained through authorized

commercial distribution channels for use in the United States with the full right to incorporate all such materials, equipment and systems into the Project Facilities for ownership by City on the terms and conditions set out in this Agreement.

3.26.2 The Project Warranties include remedy for damage or defect caused by:

- (a) operations and maintenance of the Project Facilities by any DB-Related Entity prior to the Date of Substantial Completion;
- (b) any failure of compliance with the Contract Standards in performing the Transition Services; and
- (c) any defects, errors or omissions in the CMMS or Operations and Maintenance Manual.

3.26.3 The Project Warranties exclude remedy for damage or defect caused by:

- (a) capital modifications to the Project Facilities not undertaken by a DB-Related Entity under this Agreement;
- (b) the failure of City to operate, maintain and manage the Project Facilities in accordance with the Operations and Maintenance Manual;
- (c) the negligence or willful misconduct of City in operating, maintaining and managing the Project Facilities; and
- (d) normal wear and tear under normal usage.

3.26.4 The Project Warranties will be in full force and effect for the Project Warranties Period. Design-Builder shall respond to notices concerning the Project Warranties in accordance with the Contract Standards. The Design-Builder's obligation to correct a defect under the Project Warranties includes the obligation to identify and correct the root cause of the defect so that correction of the defect will prevent recurrence.

3.26.5 Neither the Project Warranties Period nor any provision of this Section 3.26 shall be construed to establish a period of limitation with respect to other obligations that the Design-Builder has under this Agreement or under Applicable Law with respect to the Work, including warranties and obligations with respect to latent defects. The Project Warranties Period relates only to the specific obligations of the Design-Builder to respond to notices from City under the Project Warranties, and has no relationship to the time within which the obligation of the Design-Builder to comply with this Agreement may be enforced, nor the time within which proceedings may be commenced to establish Design-Builder's liability with respect to its obligations under this Agreement.

3.26.6 Design-Builder acknowledges and agrees that the Project Warranties are in addition to, and not in limitation of, any other warranties, rights and remedies available under this Agreement or Applicable Law, and shall not limit Design-Builder's liability or responsibility imposed by this Agreement or Applicable Law with respect to the Work, including liability for design defects, latent construction defects, strict liability, negligence or fraud. The provisions of this Section 3.26 shall survive the termination of this Agreement.

3.26.7 Without limiting any of the Project Warranties, Design-Builder shall, for the protection of City, obtain from all Subcontractors and Suppliers from which Design-Builder procures structures, improvements, fixtures, machinery, equipment and materials such warranties and guarantees as are normally provided with respect thereto and as may be specifically required by the Contract Documents, each of which shall be assigned to City to the full extent of the terms thereof. No such warranty or guarantee shall relieve Design-Builder of any obligation hereunder, and no failure of any warranted or guaranteed structures, improvements, fixtures, machinery, equipment or material shall be the cause for any increase in the Contract Compensation or otherwise excuse Design-Builder from the performance of any Work, unless such failure is itself attributable to an Uncontrollable Circumstance.

3.26.8 Nothing in this Agreement is intended to limit any third-party warranty that provides City with greater warranty rights than those provided under the Project Warranties.

3.26.9 During the Project Warranties Period, Design-Builder (or City) shall be permitted to enforce all warranties provided by manufacturers, Suppliers and other third parties with respect to the Work. However, no such warranty shall relieve Design-Builder of any obligation with respect to the Project Warranties.

3.27 Release and Indemnification

3.27.1 DESIGN-BUILDER AGREES TO AND SHALL RELEASE THE CITY, ITS AGENTS, EMPLOYEES, OFFICERS AND LEGAL REPRESENTATIVES (COLLECTIVELY THE "CITY") FROM ALL LIABILITY FOR INJURY, DEATH, DAMAGE, OR LOSS TO PERSONS OR PROPERTY SUSTAINED IN CONNECTION WITH OR INCIDENTAL TO PERFORMANCE UNDER THIS AGREEMENT, EVEN IF THE INJURY, DEATH, DAMAGE, OR LOSS IS CAUSED BY THE CITY'S CONCURRENT (BUT NOT SOLE) NEGLIGENCE AND/OR THE CITY'S STRICT

PRODUCT'S LIABILITY OR STRICT STATUTORY LIABILITY.

3.27.2 DESIGN-BUILDER AGREES TO AND SHALL DEFEND, INDEMNIFY, AND HOLD THE CITY, ITS AGENTS, EMPLOYEES, OFFICERS, AND LEGAL REPRESENTATIVES (COLLECTIVELY THE "CITY") HARMLESS FOR ALL THIRD PARTY CLAIMS, CAUSES OF ACTION, LIABILITIES, FINES, AND EXPENSES (INCLUDING, WITHOUT LIMITATION, ATTORNEYS' FEES, COURT COSTS, AND ALL OTHER DEFENSE COSTS AND INTEREST) FOR INJURY, DEATH, DAMAGE, OR LOSS TO PERSONS OR PROPERTY SUSTAINED IN CONNECTION WITH OR INCIDENTAL TO PERFORMANCE UNDER THE CONTRACT INCLUDING, WITHOUT LIMITATION, THOSE CAUSED BY:

1. DESIGN-BUILDER'S AND/OR ITS AGENTS, EMPLOYEES, OFFICERS, DIRECTORS, CONTRACTORS, OR SUBCONTRACTORS (COLLECTIVELY IN NUMBERED PARAGRAPHS 1. THROUGH 3., "DESIGN-BUILDER") BREACH OF THIS AGREEMENT, ACTUAL OR ALLEGED NEGLIGENCE OR INTENTIONAL ACTS OR OMISSIONS;
2. THE CITY'S AND DESIGN BUILDER'S ACTUAL OR ALLEGED CONCURRENT NEGLIGENCE. WHETHER DESIGN-BUILDER IS IMMUNE FROM LIABILITY OR NOT, AND
3. THE CITY'S AND DESIGN-BUILDER'S ACTUAL OR ALLEGED CONCURRENT STRICT PRODUCTS LIABILITY WHETHER DESIGN-BUILDER IS IMMUNE FROM LIABILITY OR NOT.

DESIGN-BUILDER SHALL DEFEND, INDEMNIFY, AND HOLD THE CITY HARMLESS DURING THE TERM OF THE CONTRACT AND FOR FOUR YEARS AFTER THE CONTRACT TERMINATES. DESIGN-BUILDER SHALL NOT INDEMNIFY THE CITY FOR THE CITY'S SOLE NEGLIGENCE.

3.27.3 THE INDEMNIFICATION OBLIGATIONS UNDER SECTION 3.27.2 SHALL NOT BE LIMITED IN ANY WAY BY THE LIMITS OF ANY INSURANCE COVERAGE OR ANY LIMITATION ON THE AMOUNT OR TYPE OF DAMAGES, COMPENSATION, OR BENEFITS PAYABLE BY, FOR, OR TO DESIGN-BUILDER OR ANY OTHER DB-RELATED ENTITY, OR ANY OTHER INDIVIDUAL OR ENTITY UNDER ANY INSURANCE POLICY, WORKERS' COMPENSATION ACTS, DISABILITY BENEFIT ACTS OR OTHER EMPLOYEE BENEFITS ACTS.

3.27.5 TO THE EXTENT THE INDEMNIFICATION OBLIGATIONS HEREUNDER AFFECT THE PERMISSIBLE INDEMNITY AFFORDED TO THE CITY UNDER APPLICABLE LAW, THEN ANY SUCH OFFENDING INDEMNITY CLAUSE SHALL BE REVISED AND INTERPRETED IN SUCH A WAY AS TO PROVIDE THE CITY THE MAXIMUM PERMISSIBLE INDEMNITY IN ACCORDANCE WITH THE TERMS OF THE INDEMNITY CLAUSE BUT ONLY UP TO THE LIMIT PERMITTED BY APPLICABLE LAW.

3.28 Release and Indemnification – Subcontractor and Supplier Claims

3.28.1 DESIGN-BUILDER AGREES TO AND SHALL RELEASE AND DEFEND, INDEMNIFY, AND HOLD HARMLESS THE AGENTS, CITY, ITS EMPLOYEES, OFFICERS, LEGAL AND REPRESENTATIVES (COLLECTIVELY THE “CITY”) FROM ALL CLAIMS OR CAUSES OF ACTION FOR PAYMENT OR DAMAGES BROUGHT AGAINST THE CITY BY ANY PERSON WHO FURNISHES OR CLAIMS TO HAVE FURNISHED ANY LABOR, SERVICES, MATERIALS OR EQUIPMENT IN CONNECTION WITH THE WORK.

3.29 Release and Indemnification – Patent, Copyright, Trademark, and Trade Secret Infringement

3.29.1 UNLESS OTHERWISE SPECIFICALLY REQUIRED BY THIS AGREEMENT, DESIGN-BUILDER AGREES TO AND SHALL RELEASE AND DEFEND, INDEMNIFY, AND HOLD HARMLESS THE AGENTS, CITY, ITS EMPLOYEES, OFFICERS, LEGAL AND REPRESENTATIVES (COLLECTIVELY THE “CITY”) FROM ALL CLAIMS OR CAUSES OF ACTION BROUGHT AGAINST THE CITY BY ANY PERSON, INCLUDING DESIGN-BUILDER, ALLEGING THAT THE CITY’S USE OF ANY EQUIPMENT, SOFTWARE, PROCESS, OR DOCUMENTS DESIGN-BUILDER FURNISHES DURING THE TERM OF THIS AGREEMENT INFRINGES ON A PATENT, COPYRIGHT, OR TRADEMARK, OR MISAPPROPRIATES A TRADE SECRET. DESIGN-BUILDER SHALL PAY ALL COSTS (INCLUDING, WITHOUT LIMITATION, ATTORNEYS’ FEES, COURT COSTS, AND ALL OTHER DEFENSE COSTS, AND INTEREST) AND DAMAGES AWARDED.

3.29.2 DESIGN-BUILDER SHALL NOT SETTLE ANY CLAIM ON TERMS WHICH PREVENT THE CITY FROM USING THE EQUIPMENT, SOFTWARE, PROCESS, OR PRODUCT WITHOUT THE

PROJECT DIRECTOR’S PRIOR WRITTEN CONSENT.

3.29.3 UNLESS OTHERWISE SPECIFICALLY REQUIRED BY THIS AGREEMENT, WITHIN 60 DAYS AFTER BEING NOTIFIED OF THE CLAIM, DESIGN-BUILDER SHALL, AT ITS OWN EXPENSE, EITHER:

1. OBTAIN FOR THE CITY THE RIGHT TO CONTINUE USING THE EQUIPMENT, SOFTWARE, PROCESS, OR PRODUCT, OR
2. IF BOTH PARTIES AGREE, REPLACE OR MODIFY THEM WITH COMPATIBLE AND FUNCTIONALLY EQUIVALENT PRODUCTS.

IF NONE OF THESE ALTERNATIVES IS REASONABLY AVAILABLE THE CITY MAY, WITHOUT LIMITING ANY LIABILITY OF THE DESIGN-BUILDER HEREUNDER RETURN THE EQUIPMENT, SOFTWARE, OR PRODUCT, OR DISCONTINUE THE PROCESS AND DESIGN-BUILDER SHALL REFUND THE PURCHASE PRICE.

3.30 Indemnification Procedures

3.30.1 Notice of Indemnification Claims. If City or Design-Builder receives notice of any claim or circumstances which could give rise to an indemnified loss, the receiving Party shall give written notice to the other Party within 10 days. The notice must include the following:

1. a description of the indemnification event in reasonable detail;
2. the basis on which indemnification may be due; and
3. the anticipated amount of the indemnified loss

This notice does not stop or prevent City from later asserting a different basis for indemnification or a different amount of indemnified loss than that indicated in the initial notice. If City does not provide this notice within the 10-day period, it does not waive any right to indemnification except to the extent that Design-Builder demonstrates, bearing the burden of proof, that it is prejudiced, suffers loss, or incurs expense because of the delay.

3.30.2 Defense of Indemnification

1. Assumption of Defense. Design-Builder may assume the defense of the claim at its own expense with counsel chosen by it that is reasonably satisfactory to City. Design-Builder shall then control the defense and any

negotiations to settle the claim. Within 10 days after receiving written notice of the indemnification request, Design-Builder must advise City as to whether or not it will defend the claim. If Design-Builder does not assume the defense, City shall assume and control the defense, and all defense expenses constitute an indemnified loss.

2. Continued Participation. If Design-Builder elects to defend the claim, City may retain separate counsel to participate in, but not control, the defense and to participate in, but not control, any settlement negotiations. Design-Builder may settle the claim without the consent or agreement of City, unless it:
 - a. would result in injunctive relief or other equitable remedies or otherwise require City to comply with restrictions or limitations that adversely affect City;
 - b. would require City to pay amounts that Design-Builder does not fund in full; or
 - c. would not result in City's full and complete release from all liability to the plaintiffs or claimants who are parties to or otherwise bound by the settlement.

Article 4 – Administrative of the Contract

4.1 City Observation of Work

4.1.1 Notwithstanding the City's inspection, monitoring and review rights under this Agreement, Design-Builder recognizes that City does not have control over or charge of, and is not responsible for, the Work. Design-Builder is solely responsible for the Work, including all Design Professional Services, supervision, Construction, and safety procedures related to the Work. City does not have control over or charge of and is not responsible for acts or omissions of any DB-Related Entity.

4.1.2 Design-Builder shall fully cooperate with all City Technical Consultants designated by City from time to time. It is understood that the services intended to be provided by the City Technical Consultants shall be of an observational and review nature only, and that the City Technical Consultants will not have authority to interfere with, halt or delay in any way the progress of the Work, to require or approve changes to the Work or to bind the City in any manner. The services of the City Technical Consultants may include:

- (a) review of all design submittals and plans for the performance of the Work, including Final Design and Construction Documents and other submittals;

- (b) review proposed changes to the Work, including proposed changes to the Baseline Design Documents;
- (c) determine the completion of specified portions of the Work on behalf of City and review Applications for Payment;
- (d) review and monitor construction progress, scheduling, payments and procedures;
- (e) monitor commissioning activities and the Acceptance Tests to assist the Project Director in determining whether any Acceptance Standard has been satisfied;
- (f) assist the Project Director in reviewing the validity of any Claim asserted by the Design-Builder; and
- (g) review and advise City with respect to material changes to the Project prior to Final Completion.

4.2 No Acceptance, Waiver, or Release

4.2.1 None of the following, without limitation, shall be construed as (a) City's acceptance of any Work which is defective, incomplete, or otherwise not in compliance with this Agreement, (b) City's release of the Design-Builder from any obligation under this Agreement, (c) City's extension of the Design-Builder's time for performance, (d) an estoppel against City, or (e) City's acceptance of any Claim by Design-Builder:

1. City's payment to Design-Builder or any other Person with respect to the Project;
2. City's review, consent, approval or acceptance, as applicable, of the Baseline Design Documents, any Final Design and Construction Documents, submissions, permit applications, punch lists, other documents, certifications, or Work of the Design-Builder or any other DB-Related Entity;
3. City's review of (or failure to prohibit) any construction applications, means, methods, techniques, sequences, or procedures for the Work;
4. City's entry at any time on the Project Site (including any area in which the Work is being performed);
5. any observation, inspection or testing of (or failure to observe, inspect or test) any Work (whether finished or in-progress) by City or any other Person;
6. the failure of City or any City representative or consultant to respond in writing to any notice or other communication of Design-Builder; or
7. any other exercise of rights or failure to exercise rights by City hereunder.

4.3 Communications in Administration of the Contract

4.3.1 Except as otherwise provided in the Contract Documents or when authorized by the Project Director in writing, Design-Builder shall communicate with the Project Director. Except as expressly required or authorized by the Contract Documents or the Project Director, Design-Builder shall communicate with Separate Contractors through the Project Director. The Project Director will communicate with Design Subconsultants, Subcontractors and Suppliers available for meetings with the Project Director as reasonably requested by the Project Director or otherwise required by the Contract Documents.

4.4 Claims and Disputes

4.4.1 Informal Negotiations: The Project Director and representatives of Design-Builder with day-to-day involvement in the administration of this Agreement and the performance of the Work shall initially and promptly enter into negotiations to attempt to address and resolve any disputes that may arise concerning this Agreement. In connection with such negotiations, the Party asserting the dispute shall provide the other with a written description of the nature of the dispute, along with reasonable supporting documentation. At the Project Director's request, the Design-Builder shall involve its senior representatives, including senior representatives of any other DB-Related Entity in such negotiations. Upon the expenditure of reasonable efforts towards resolution of a dispute through such informal negotiations without reaching agreement, a Party may declare that the informal negotiations have been exhausted and such Party may request Non-Binding Mediation or elect to make a Claim to the City Engineer. Nothing in this Section shall be interpreted to restrict Design-Builder from submitting a Claim to the City Engineer within the time limit established under Section 4.4.4; however, City Engineer may require compliance with this Section prior to taking any action under Section 4.5.

4.4.2 Documentation to City Engineer: Subject to Section 4.4.1, Design-Builder shall submit Claims to City Engineer.

4.4.3 Decision of City Engineer: Upon submission of Claim by Design-Builder, City Engineer will resolve Claims in accordance with Section 4.5.

4.4.4 Time Limits on Claims: Without limiting any other notice requirement hereunder, Claims by Design-Builder shall be made within 91 days after the occurrence of the event giving rise to such Claim. Claims by Design-Builder not made within the time

required in the required manner shall be deemed waived by Design-Builder, subject to Section 4.8.3.

4.4.5 Continuing the Contract Performance: Unless otherwise directed in writing by Project Director, at all times during the course of any dispute resolution procedure or Legal Proceeding, Design-Builder shall continue with the performance of the Work in a diligent manner and in accordance with the applicable provisions of this Agreement. City shall continue to satisfy its uncontested payment obligations to Design-Builder during the pendency of any such dispute, subject to the terms and conditions of this Agreement. Records of the Work performed during such time shall be kept in accordance with the applicable provisions of this Agreement.

4.4.5.1 Without limiting any other responsibility under this Agreement, pending final resolution of a Claim, including referral to Non-Binding Mediation, Design-Builder is responsible for safety and protection of physical properties and conditions at the Project Site.

4.4.6 Claims for Additional Cost: If Design-Builder wishes to make a Claim to increase Contract Compensation, Design-Builder shall give written notice before proceeding with Work for which Design-Builder intends to submit a Claim. Prior notice is not required for Claims relating to an emergency endangering life or property arising under Section 3.15.

4.4.6.1 Design-Builder may file a Claim in accordance with Section 4.4.6 if Design-Builder believes it has incurred additional costs, for the following reasons:

1. written interpretation of the Project Director contrary to the terms of the Contract Documents;
2. order by the Project Director to stop the Work when Design-Builder is not at fault;
3. suspension of the Work by the Project Director when Design-Builder is not at fault;
4. City's non-compliance with another provision of the Contract Documents;
5. the issuance of a City-directed Modification; or
6. the occurrence of an Uncontrollable Circumstance.

4.4.6.2 Claims for additional cost are further subject to Article 7 and Article 8.

4.4.7 Claims for Additional Time: If Design-Builder wishes to make a Claim for an increase in Contract Time, Design-Builder shall give written notice as provided in Section 8.2. In case of continuing delay,

only one Claim is necessary. Claims for additional time are further subject to Article 7 and Article 8.

4.4.8 Duty to Mitigate: In all cases where the Design-Builder is entitled to receive any relief from the City or exercise any rights, including the right to receive any payments, costs, damages or extensions of time, whether on account of Uncontrollable Circumstance or otherwise, the Design-Builder shall use all reasonable efforts to mitigate such amount required to be paid by the City to the Design-Builder under this Agreement, or the length of the extension of time. Upon request from the Project Director, the Design-Builder shall promptly submit a detailed description, supported by all such documentation as the Project Director may reasonably require, of the measures and steps taken or

to be taken by the Design-Builder to mitigate and meet its obligations under this Section.

4.5 Resolution of Claims and Disputes

4.5.1 City Engineer will review Claims and take one or more of the following preliminary actions within 30 days of receipt of Claim:

1. submit a suggested time to meet and discuss the Claim with City Engineer;
2. reject Claim, in whole or in part, stating reasons for rejection;
3. recommend approval of the Claim by the other Party;
4. suggest a compromise; or
5. take other actions as City Engineer deems appropriate to resolve the Claim.

4.5.2 City Engineer may request additional supporting data from claimant. Party making Claim shall, within 10 days after receipt of City Engineer's request, submit additional supporting data requested by City Engineer.

4.5.3 At any time prior to rendering a written decision regarding a Claim, City Engineer may suggest Non-Binding Mediation, subject to Section 4.6. If Claim is resolved, City Engineer will prepare and obtain all appropriate documentation.

4.5.3.1 If Claim is not referred to Non-Binding Mediation, City Engineer will render a written decision within 75 days of receipt of the Claim, or a time mutually agreed upon by the Parties in writing. City Engineer may notify Surety and request Surety's assistance in resolving a Claim.

4.5.3.2 The City Engineer's final, written decision under Section 4.5.3.1 shall be a condition precedent to the Design-Builder's right to initiate Legal Proceedings concerning any Claim. If Design-Builder

disagrees with City Engineer's decision or if the City Engineer fails to render a written decision in accordance with Section 4.5.3.1, then the Design-Builder shall have the right to initiate Legal Proceedings concerning the Claim, subject to Section 11.1.2. If the Design-Builder fails to initiate Legal Proceedings concerning the Claim within 30 days following the earlier to occur of the issuance of the City Engineer's decision or the expiration of the period specified in Section 4.5.3.1, then the Design-Builder shall be deemed to have accepted the final decision of the City Engineer and waived any right to initiate Legal Proceedings concerning the Claim.

4.6 Non-Binding Mediation

4.6.1 Either party may request Non-Binding Mediation of any dispute arising under this Agreement, whether technical or otherwise. Non-Binding Mediation is voluntary and will not be a condition precedent to submitting a dispute to the City Engineer. The non-requesting Party may decline the request in its sole discretion. If there is concurrence that any particular matter shall be mediated, the provisions of this Section 4.6 shall apply. The costs of such Non-Binding Mediation shall be divided equally between the Parties.

4.6.2 The mediator shall be a professional engineer, attorney or other professional mutually acceptable to the Parties who has no current or on-going relationship to either Party. The mediator shall have full discretion as to the conduct of the mediation. Each Party shall participate in the mediator's program to resolve the dispute until and unless the Parties reach agreement with respect to the disputed matter or one Party determines in its sole discretion that its interests are not being served by the mediation.

4.6.3 Mediation is intended to assist the parties in resolving disputes concerning this Agreement. No mediator shall be empowered to render a binding decision.

4.7 Waiver of Attorney Fees and Interest

4.7.1 Except as provided in the indemnification provisions, neither the City nor Design-Builder may recover attorney fees for any claim brought in connection with this Contract.

4.7.2 Neither the City nor the Design-Builder may recover interest for any damages claim brought in connection with this Agreement except as allowed by TEXAS LOCAL GOVERNMENT CODE Chapter 2251.

4.8 Interim Payment Waiver and Release

4.8.1 Design-Builder shall use due diligence in the discovery and submission of any Claim against the City related to the Work.

4.8.2 The Design-Builder shall submit any Claim to the City not later than the 91st day after the occurrence of the event giving rise to the Claim.

4.8.3 Any failure to timely comply with the requirements of Section 4.4.4 waives and releases any Claim when the Design-Builder submits an application for payment after the 91st day.

4.8.4 This waiver does not cover any retainage. In case of any conflict of law, this language shall be revised to the minimum extent necessary to avoid legal conflict. This waiver is made specifically for the benefit of the City.

Article 5 – Design Subconsultants, Subcontractors and Suppliers

5.1 Award of Contracts

5.1.1 Design-Builder shall select any Design Subconsultant in accordance with Exhibit E. Design-Builder shall procure and select Subcontractors and Suppliers in accordance with the procedures specified in Exhibit G.

5.1.2 Without limiting any other provision of the Contract Documents and except as otherwise agreed in writing by the Project Director in the Project Director's sole discretion, Design-Builder shall provide reasonable advance written notice to the Project Director prior to any DB-Related Entity entering into any Subcontract, along with a draft of the proposed Subcontract and any information reasonably requested by the Project Director concerning the Person with whom the DB-Related Entity proposes to enter into the Subcontract. No DB-Related Entity may enter into any first-tier or second-tier Subcontract, whether initially or as a replacement or assignment, with any Person concerning whom the Project Director has a reasonable objection. The Project Director shall be deemed to have no reasonable objection to those Persons that have been identified on a prequalification list furnished to and approved in writing by the Project Director. In no event shall any Subcontract be awarded to, or maintained with, any Person debarred, suspended or disqualified from City contracting.

5.1.3 If the Project Director has a reasonable objection to any Person proposed by Design-Builder, Design-Builder shall propose another Person with

whom the Project Director has no reasonable objection.

5.1.4 DB-Related Entities shall execute Subcontracts with approved Persons before such Person begins any Work. Except as otherwise agreed in writing by the Project Director in the Project Director's sole discretion, the Design-Builder shall provide the City with executed copies of all Subcontracts within five days following execution of the Subcontract and with copies of any amendments or modifications to such Subcontracts within five days following the execution of the amendment or modification. All Subcontracts shall require the Design Subconsultant, Subcontractor or Supplier, as applicable, to the extent of the Work to be furnished or performed under the Subcontract, to be bound by the applicable terms and conditions of the Contract Documents for the benefit of City. Each Subcontract shall preserve and protect the rights of the City hereunder with respect to the Work to be furnished or performed under the Subcontract, including any limitations on the City's payment obligations hereunder, so that the subcontracting thereof will not prejudice or otherwise affect such City rights.

5.1.5 Design-Builder shall make available to each proposed Design Subconsultant, Subcontractor or Supplier, prior to execution of the Subcontract, copies of the Contract Documents to which such Person will be bound under Section 5.1.4. Prior to any Design Subconsultant, Subcontractor or Supplier commencing performance of any Subcontract, Design-Builder shall meet with such DB-Related Entity to provide instructions on invoicing procedures, dispute resolution procedures, and statutory rights, such as Section 2253 of the Texas Government Code. Design Subconsultants, Subcontractors and Suppliers must certify to the Project Director that Design-Builder has fulfilled the requirements of this Section.

5.16 All Design Subconsultants, Subcontractors and Suppliers shall be appropriately licensed under Applicable Law and qualified to furnish or perform the Work required to be furnished or performed by the Design Subconsultant, Subcontractor or Supplier under the applicable Subcontract.

5.1.7 Design-Builder shall make timely payments under all Subcontracts in accordance with the terms of the Subcontracts and all requirements of Applicable Law. Once a Design Subconsultant, Subcontractor or Supplier completes performance under and in accordance with the term of the Subcontract, Design-Builder shall release all retainage held under the Subcontract, regardless of whether City continues to hold retainage under this Agreement. No Design

Subconsultant, Subcontractor or Supplier shall have any right or claim against the City for labor, services, materials or equipment furnished or performed in connection with the Work. The Design-Builder acknowledges that its indemnity obligations hereunder extend to all claims for payment or damages by any Design Subconsultant, Subcontractor or Supplier.

5.1.8 At the reasonable request of the Project Director, Design-Builder shall make key representatives of any Design Subconsultant, Subcontractor or Supplier available for meetings between the City and Design-Builder concerning design reviews, Construction progress, commissioning, Acceptance Testing, disputes or any other matter relating to the Work, where the particular Subcontract is relevant to the purpose of the meeting.

5.1.9 All Subcontracts shall be assignable to the City, solely at the City's election and without cost or penalty, upon any termination of this Agreement, including any convenience termination.

5.1.10 Unless the Design-Builder has, at its earliest practicable opportunity, submitted to the Project Director notice of the proposed course of action (and any relevant documentation) and the Project Director has consented in writing to such course of action, such consent not to be unreasonably withheld or delayed, the Design-Builder shall not:

1. terminate, or agree to, or permit the termination of, any Major Subcontract;
2. make, or agree to, or permit the making of (a) any material amendment of any Major Subcontract; or (b) any departure by any party from any material provision of any Major Subcontract; or
3. permit any Major Subcontract party to assign or transfer to any person any of such Subcontract party's rights or obligations under a Major Subcontract.

5.2 Design Builder Responsibility

5.2.1 Design-Builder is responsible to City for all acts and omissions of Design Subconsultants, Subcontractors and Suppliers furnishing or performing any Work under any Subcontract, regardless of the terms or conditions of any Subcontract.

5.2.2 No failure of any Design Subconsultant, Subcontractor or Supplier in connection with the provision of the Work shall constitute an Uncontrollable Circumstance or otherwise relieve the Design-Builder from its obligations hereunder to perform the Work, unless such failure is the result of an event which would constitute an Uncontrollable

Circumstance if it affected the Design-Builder directly. Design-Builder shall be responsible for settling and resolving with all DB-Related Entities all claims (a) arising out of delay, disruption, interference or hindrance caused by the Design Builder or any other DB-Related Entity, (b) arising from the actions or omissions of the Design-Builder or any other DB-Related Entity, or (c) inflicted on the Design-Builder or any other DB-Related Entity by the actions or omissions of any other DB-Related Entity.

5.2.3 The Project Director's approval of any Design Subconsultant, Subcontractor or Supplier does not relieve Design-Builder of its obligation to perform all Work in accordance with the Contract Standards or otherwise transfer any responsibility from the Design-Builder to the City for the performance of the Work.

Article 6 – Operations and Construction by City or by Separate Contractors

6.1 City Operations and Separate Contractors

6.1.1 Design-Builder shall undertake the Work in a manner which does not interfere with or impair the ongoing operations of the City at or near the Project Site. Prior to the commencement of any Construction, Design-Builder shall provide, for City's review and approval, a plan for the maintenance of existing operations during construction (the "MEOC Plan") in accordance with the Contract Standards. Design-Builder shall provide a final MEOC Plan, approved by the Project Director, as a precondition to the commencement of all Work with City in accordance with the Contract Standards, including the approved MEOC Plan. Design-Builder acknowledges that City's existing plant operations may require a stoppage of Work on all or a portion of the Project Site from time-to-time, subject to Section 2.5.

6.1.2 City shall have the right to perform on-site construction operations related to the Work and as part of the Project with its own forces or with Separate Contractors. The Design-Builder shall cause the Work to be performed without damaging the work or property of any Separate Contractor and shall not cause any unnecessary hindrance or delay to any other contractors working at the Project Site. The Design-Builder agrees to reasonably cooperate and coordinate its activities with those of all Separate Contractors so that the Project and any Related Project can be completed in an orderly and coordinated manner without unreasonable disruption, subject to Sections 6.2 and 6.4.

6.2 Coordination

6.2.1 City will coordinate activities of City's workforce and of each Separate Contractor with work of Design-Builder, and Design-Builder shall cooperate with City and all Separate Contractors.

6.2.1.1 City intends to have coordination meetings among the Design-Builder and the various Separate Contractors in an effort to manage the overall program associated with the work being performed at the Project Site and to avoid or mitigate cost and time impacts to the overall capital improvements program. The Design-Builder agrees that it will attend and participate in these logistics meetings and shall cooperate with City and the Separate Contractors to the extent reasonably necessary for the performance by such other contractors of their work.

6.2.2 Design-Builder shall afford to City and Separate Contractors reasonable opportunity for introduction and storage of their materials and equipment, and for performance of their activities.

6.2.3 If part of Design-Builder's Work depends on proper execution of construction or operations by City or a Separate Contractor, Design-Builder shall, prior to proceeding with that portion of the Work, inspect the other work and promptly report to Project Director apparent discrepancies or defects in the other construction that would render it unsuitable for the proper execution of the Work. Failure of Design-Builder to report apparent discrepancies or defects in the other construction shall constitute acknowledgment that City's or Separate Contractor's completed or partially completed construction is fit and proper to receive Design-Builder's Work, except as to discrepancies or defects not then reasonably discoverable.

6.3 Cutting and Patching

6.3.1 Design-Builder is responsible for necessary cutting, fitting, and patching to accomplish the Work and shall suitably support, anchor, attach, match, and trim or seal materials to work of other contractors. Design-Builder shall coordinate the Work with work of Separate Contractors to minimize conflicts.

6.3.2 Design-Builder shall not endanger work by cutting, digging, or other action, and may not cut or alter work of Separate Contractors except by written consent of the Project Director and affected Separate Contractor.

6.3.3 If authorized by City, cutting shall be accurately located and neatly done. Unnecessary cutting shall be avoided. Patching shall be done by skilled mechanics experienced in the particular type of work involved. Patching work shall conform to the Contract Standards. Finished patching in the work of a Separate Contractor shall be acceptable to the Project Director and the Separate Contractor whose work has been patched.

6.3.4 Design-Builder shall leave all holes, chases, and other openings in its construction required by any Separate Contractor for the installation of their work, provided such openings are accurately located by the party requiring them before the execution of the construction. Design-Builder shall afford Separate Contractors a reasonable opportunity to locate such openings.

6.4 Disputes and Separate Contractors

6.4.1 If the performance of any work by City or a Separate Contractor is likely to be interfered with by the simultaneous performance of some other contract or contracts, City shall decide which contractor shall cease work temporarily and which contractor shall continue or whether the work under the contracts can be coordinated so that the contractors may proceed simultaneously. On all questions concerning conflicting interest of contractors performing related work, the decision of the Project Director shall be binding upon the Design-Builder and all Separate Contractors concerned and City shall not be responsible for any damages suffered or extra costs incurred by the Design-Builder resulting directly or indirectly from the award or performance or attempted performance of any other contract or contracts at the Project Site or, except as specifically provided in the next sentence of this Section, caused by a decision or omission of the Project Director respecting the order of precedence in the performance of all such contracts. Any decision by Project Director to halt or delay the performance of the Work by the Design-Builder pursuant to this Section shall be made in accordance with Section 2.5. The Design-Builder agrees that no such action by the Project Director will entitle the Design-Builder to any relief hereunder or any adjustment to the Contract Times or Contract Compensation under circumstances of Design-Builder Fault, including any failure of Design-Builder to coordinate with Separate Contractors or any other breach by the Design-Builder of its obligations under this Article.

6.4.2 Design-Builder's obligations under Section 3.14.9 shall be applicable to any damage to

completed or partially completed construction or to property of City or any Separate Contractor.

6.5 City's Right to Clean Up

6.5.1 If a dispute arises among Design-Builder, Separate Contractors, and City as to responsibility under their respective contracts for maintaining premises and surrounding area free from waste materials and rubbish, City may clean up and allocate cost among those responsible, as determined by the Project Director.

Article 7 – Changes in the Work

7.1 Changes Generally

7.1.1 Changes in scope of the Work, subject to limitations in this Article 7 and elsewhere in the Contract Documents, may be accomplished, without invalidating this Agreement and without any requirement of notifying Surety, by:

1. with respect to the Preliminary Services, written notice by the Project Director in accordance with Exhibit C;
2. Change Order;
3. Work Change Directive; or
4. Field Order.

7.1.2 The following types of Change Orders require City Council approval.

1. a single Change Order that increases the Guaranteed Maximum Price by more than 5% or any Contract Compensation by more than 10%;
2. a Change Order which, when added to previous Change Orders, increases the Guaranteed Maximum Price by more than 5% or any Contract Compensation by more than 10%;

Subject to the foregoing, the Project Director may sign and authorize Modifications. Nothing in this Paragraph is intended to permit an increase of the Guaranteed Maximum Price in excess of the limit set out in TEX. LOC. GOV'T CODE ANN. §252.048 or its successor statute.

7.1.3 Design-Builder shall proceed with any change in the Work authorized or directed through a Modification in accordance with the terms and conditions of the Modification.

7.2 Unauthorized Changes

7.2.1 Design-Builder shall not be entitled to any increase in the Guaranteed Maximum Price or any adjustment to the Contract Compensation or Contract

Times with respect to any Work performed that is not required by the Contract Documents. Design-Builder acknowledges City's material interest in each provision of the Contract Documents and agrees that no change from any requirement of the Contract Documents shall be permitted in the performance of Work except as specifically provided in this Article 7.

7.2.2 Without limiting any other requirement of this Agreement, (a) no material change from the Baseline Design Documents shall be made in the Final Design and Construction Documents; and (b) no material variation from the Final Design and Construction Documents shall be permitted in the performance of Construction, except through a Modification. Except to the extent specifically provided in the Contract Documents with respect to the occurrence of Uncontrollable Circumstances or City Fault, the City shall have no obligation to issue any Modification and may withhold its approval of or condition any Modification requested by Design-Builder in the City's sole discretion.

7.3 Permissible Variations

7.3.1 Reasonable, minor variations from the Baseline Design Documents shall be permitted in the Final Design and Construction Documents without the need for a Modification to the extent such variations: (a) are submitted to the City in accordance with the Submittal Protocol; (b) do not diminish the quality, integrity, durability, functionality and reliability of the Project Facilities; and (c) are accepted by the City pursuant to Section 3.5. Any such reasonable, minor variations shall be tracked in accordance with the Submittal Protocol.

7.3.2 Similarly, reasonable, minor variations from the Final Design and Construction Documents in the performance of Construction shall be permitted without the need for a Modification to the extent such variations: (a) are submitted to the City in accordance with the Submittal Protocol; (b) do not diminish the quality, integrity, durability, functionality and reliability of the Project Facilities; and (c) are accepted by the City pursuant to Section 3.5. Any such reasonable, minor variations shall be tracked in accordance with the Submittal Protocol.

7.4 Change Orders

7.4.1 Project Director may, in anticipation of possibly ordering an addition, deletion or revision to the Work, request Design-Builder to prepare a proposal of cost and time to perform the contemplated changes in the Work, along with any other proposed changes to the Contract Documents. Design-Builder's written proposal shall be prepared in accordance with Exhibit

G on a proposal request form approved by Project Director and shall be transmitted to the Project Director promptly, but not later than fourteen days after Design-Builder's receipt of Project Director's written request, and shall remain a firm offer for a period not less than forty-five days after receipt thereof by Project Director. Design-Builder is not authorized to proceed with any contemplated change in the Work prior to Design-Builder's receipt of a Change Order (or Work Change Directive) incorporating such change into the Work.

7.4.2 Project Director may negotiate the written proposal delivered pursuant to Section 7.4.1 with Design-Builder. If Project Director accepts such written proposal without adjustment to its terms, Project Director may issue a Change Order for the written proposal within the firm-offer period specified in Section 7.4.1, and Design-Builder's signing of the written proposal shall be deemed equivalent to signing the Change Order.

7.4.3 To the extent that an Uncontrollable Circumstance occurs that affects to a material extent Design-Builder's time or cost of performing the Work, Design-Builder shall give the Project Director written notice in accordance with Section 7.8. The Project Director will investigate such Uncontrollable Circumstance and, if the Project Director determines that it causes an increase or decrease in Design-Builder's cost of, or time required for, performance of the Work and that the notice was given timely, City and Design-Builder shall enter into a Change Order in accordance with the provisions of this Article 7. The Design-Builder shall consult with the Project Director concerning possible means of addressing and mitigating the effect of any Uncontrollable Circumstance, and the Design-Builder and the City shall cooperate in order to minimize any delay, lessen any additional cost and modify the Work so as to permit the Design-Builder to continue performing the Work in light of such Uncontrollable Circumstance. Any relief to which the Design-Builder is entitled hereunder on account of Uncontrollable Circumstances shall be adjusted to account for the effect of the mitigation measures which were or should have been taken by the Design-Builder in compliance with its duty to mitigate under Section 4.4.8. Any relief provided to the Design-Builder in a Change Order resulting from an Uncontrollable Circumstance shall properly reflect the interference with performance, the time lost as a result thereof, or the amount of the increased cost, in each case only to the minimum extent necessary to compensate the Design-Builder or provide performance or schedule relief and only to the extent directly attributable to the Uncontrollable Circumstance. The Design-Builder shall not be entitled to any price relief on account of

any costs incurred as the result of an act, event or circumstance that the Design-Builder is obligated to insure against under the Exhibit H, irrespective of any limits of coverage and of any deductible applicable under any policy of insurance maintained or required to be maintained thereunder.

7.4.4 The signing of any Change Order by Design-Builder shall constitute an acknowledgement and agreement that:

1. Any increase in the Guaranteed Maximum Price in the Change Order represents Design-Builder's maximum compensation and reimbursement for the performance of the change in the Work, including all costs whatsoever associated with the Change Order and the cumulative impact of the Change Order on the Work;
2. the Change Order constitutes full accord and satisfaction for the change in the Work;
3. Design-Builder reserves no right to pursue any subsequent Claim concerning the Change Order; and
4. all necessary amendments to the Contract Documents are reflected in the Change Order and no subsequent Claim or amendment of the Contract Documents will arise out of or as a result of the Change Order.

7.5 Work Change Directives

7.5.1 The Parties intend to negotiate the terms of any Change Order prior to Design-Builder incurring any costs with respect to any such change or adjustment. The Design-Builder shall consult with the Project Director concerning possible means of addressing any proposed change to the Work and, without limiting any of the rights of City hereunder, Design-Builder and City shall cooperate in order to minimize any delay and lessen any additional cost in light of such proposed change in the Work.

7.5.2 Notwithstanding the foregoing, City shall have the right to issue a Work Change Directive at any time prior to Final Completion. A Work Change Directive may be issued (a) to address any inability of the Parties to reach agreement as to the terms and conditions of a Change Order, or (b) to direct changes in the Work in circumstances where Design-Builder has no entitlement to an increase in Contract Compensation or adjustment of the Contract Times or other performance relief hereunder, including changes required due to Design-Builder Fault. No Work Change Directive shall be made that would be contrary to Applicable Law.

7.5.3 Upon receipt of a Work Change Directive, Design-Builder shall promptly proceed with the performance of any change in the Work as instructed and shall promptly advise the Project Director in writing of the Design-Builder's agreement (or disagreement) with any price, performance or schedule relief, if any, as may be proposed by City in the Work Change Directive. If the Design-Builder receives a written communication, which the Design-Builder believes is a Work Change Directive that is not so identified, it shall not proceed with the purported change in the Work until it receives written confirmation from the Project Director that such communication is in fact a Work Change Directive. A Work Change Directive that is signed by Design-Builder and approved by City, reflecting the scope of work and any price, schedule and performance relief, if any, shall be deemed a Change Order.

7.5.4 If Design-Builder disagrees in writing with the suggested price, schedule or performance relief, if any, set out in the Work Change Directive, Design-Builder may elect to initiate dispute resolution procedures in accordance with Section 4.4. In such case, Design-Builder shall proceed with the performance of the Work in accordance with the Work Change Directive and shall keep and present, in such form as City may request, an itemized accounting to go with the appropriate supporting data with respect to Design-Builder's position, including all information necessary to substantiate any cost claimed by Design-Builder. Design-Builder shall provide notice of any disagreement pursuant to this Section within 15 days after receipt of the Work Change Directive. Upon resolution of any such dispute, the Parties shall execute a Change Order reflecting resolution of the Work Change Directive.

7.6 Adjustments in Contract Time or Guaranteed Maximum Price

7.6.1 Without limiting any City right under Section 7.5, adjustments in the Guaranteed Maximum Price, Contract Compensation or Contract Time shall be accomplished only by Change Order.

7.6.2 Any adjustment in the Guaranteed Maximum Price or Contract Compensation shall be determined based on the procedures specified in Exhibit G. A Change Order or Work Change Directive that reduces the scope of the Work shall provide for an appropriate reduction to the Guaranteed Maximum Price or Contract Compensation.

7.7 Field Orders

7.7.1 Project Director shall have the right to issue Field Orders, which are binding on the Parties but which result in no adjustment to the Guaranteed

Maximum Price. Contract Compensation or Contract Times. Contract Design Builder shall have no entitlement to a Claim or any adjustment to the Guaranteed Maximum Price. Contract Compensation or Contract Times as a result of the issuance of a Field Order.

7.8 Uncontrollable Circumstances

7.8.1 Uncontrollable Circumstances, subject to the terms and conditions of the definition thereof, may include:

1. acts of God or of the public enemy;
2. the preemption, confiscation, diversion, destruction or other interference in possession or performance of materials or services by a Governmental Body in connection with a public emergency or any condemnation or other taking by eminent domain of any material portion of the Project;
3. fires;
4. floods;
5. epidemics;
6. quarantine restrictions;
7. strikes affecting a specific trade on a national or regional level;
8. freight embargoes;
9. Inclement Weather;
10. the existence of a Differing Site Conditions subject to Sections 3.18
11. the discovery of Pollutants or Pollutant Facilities at the Project Site, subject to Section 3.17;
12. the discovery of cultural resources or the encounter of endangered species at the Project Site;
13. acts, events and circumstances associated with the Governmental Approvals, as and to the extent provided in Sections 3.2.6 and 3.2.7;
14. City Fault; and
15. a Change in Law.

7.8.2 It is specifically understood that, without limitation, none of the following acts, events or circumstances shall constitute Uncontrollable Circumstances:

1. any act, event or circumstance that would not have occurred but for the affected Party's failure to comply with its obligations hereunder;
2. changes in interest rates, inflation rates, wage rates, insurance premiums, commodity prices, labor availability, currency values, exchange rates or other economic conditions;
3. changes in the financial condition of any DB-Related Entity or any Affiliate of a DB-Related Entity affecting the ability to perform their respective obligations;

4. the consequences of error, neglect or omissions by any DB-Related Entity or any Affiliate thereof in the performance of the Work;
5. union or labor work rules, requirements or demands which have the effect of increasing the number of employees employed at the Project or otherwise increasing the cost to the Design-Builder of performing the Work;
6. strikes, labor disputes, work slowdowns, work stoppages, boycotts or other similar labor disruptions, unless such strikes, disputes, slowdowns, stoppages, boycotts or disruptions affect a specific trade on a national or regional level;
7. weather conditions that do not constitute Inclement Weather;
8. Project Site conditions other than Differing Site Conditions or Pollutants or Pollutant Facilities;
9. mechanical failure of equipment to the extent not resulting from a condition that qualifies as an Uncontrollable Circumstance;
10. the failure of the Design-Builder to secure any patent, copyright or other intellectual property right which is or may be necessary for the performance of the Work; and
11. the failure of performance by any Design Subconsultant, Subcontractor or Supplier in connection with the provision of the Work, including as a result of any material or labor shortage, unless such failure is the result of an event which would constitute an Uncontrollable Circumstance if it affected the Design-Builder directly.

7.8.3 In order to assert an entitlement based on the occurrence of an Uncontrollable Circumstance, the Design-Builder shall give notice of the occurrence of the Uncontrollable Circumstance to the Project Director as soon as practicable, and in any event within ten days (or such lesser number of days as may be specified in the Contract Documents with respect to specific Uncontrollable Circumstances) of the date the Design-Builder has knowledge that the Uncontrollable Circumstance has caused or is likely to cause an entitlement under this Agreement. The Design-Builder's notice shall include a written report:

1. describing the Uncontrollable Circumstance and the cause thereof, to the extent known;
2. stating the date on which the Uncontrollable Circumstance began and its estimated duration, to the extent known;
3. summarizing the consequences of the Uncontrollable Circumstance and the expected impact on the performance of the Design-

Builder's obligations under this Agreement; and

4. indicating the nature and scope of the Design-Builder's potential entitlement to relief.

7.8.4 The Design-Builder shall provide the Project Director with periodic updates, together with further details and supporting documentation, as it receives or develops additional information pertaining to the Uncontrollable Circumstance and the matters described in Section 7.8.3. In particular, the Design-Builder shall notify the Project Director as soon as the Uncontrollable Circumstance has ceased and of the time when performance of its affected obligations can be resumed.

7.8.5 The Design-Builder shall submit to the Project Director a further notice making its request for specific relief, the basis therefor and the event giving rise to the requested relief within 30 days after the notice referred to in Section 7.8.3. If the specific relief cannot reasonably be ascertained within such 30-day period, the Design-Builder shall furnish such notice within such longer period as necessary to detail the event and ascertain such relief. In no event shall such period exceed 91 days, as any Claim for Uncontrollable Circumstance relief is subject to Section 4.4.4.

7.8.6 Without limiting anything set forth in Section 4.4.4, if any Uncontrollable Circumstance notice or any required information is submitted by the Design-Builder to the City after the dates required under this Section, then the Design-Builder's entitlement to relief hereunder shall be limited to the extent that the ability to mitigate was adversely affected as a result of the delay in providing such notice or information.

7.8.7 The Design-Builder shall bear the burden of proof in establishing the occurrence of an Uncontrollable Circumstance and the entitlement to relief based thereon, and shall demonstrate that the Design-Builder complied with its mitigation obligations under Section 4.4.8.

7.8.8 Within 30 days after receipt of a relief request by the Design-Builder under Section 7.8.5, the Project Director shall issue a written determination as to the extent, if any, to which it concurs with the Design-Builder's request, and the reasons therefore.

7.8.9 Each submittal made under this Section by the Design-Builder shall be accompanied by a certification by an authorized representative of the Design-Builder that the submittal is made in good faith; that the supporting data are complete and accurate at the time

of the submittal to the best knowledge of the Design-Builder; and that the requested relief accurately reflects the relief to which the Design-Builder reasonably believes it is entitled. The Design-Builder shall have no entitlement to relief for uncertified claims.

Article 8 – Time

8.1 Progress and Completion

8.1.1 Time is of the essence in the performance of the Work. By executing a Major Amendment, Design-Builder agrees that the Contract Time is a reasonable period for performing the Work.

8.1.2 Computation of Time: In computing any period of time prescribed or allowed by the Contract Documents, the day of the act, event, or default after which designated period of time begins to run is not to be included. The last day of the period so computed is to be included, unless it is a Sunday or Legal Holiday, in which event the period runs until end of the next day that is not a Sunday or Legal Holiday. Sundays and Legal Holidays are considered to be days and are to be included in all other time computations relative to Contract Time.

8.1.3 Design-Builder may not commence any Phase prior to meeting requirements for insurance and Bonds required by Exhibit H.

8.1.4 Design-Builder shall proceed expeditiously and without interruption, with adequate forces, and shall achieve Date of Substantial Completion within the Contract Time.

8.1.5 Without limiting any other requirement of the Contract Documents, should progress of the Work fall behind Project Schedule by 30 days, except for reasons stated in Section 8.2.1, Design-Builder shall promptly submit at the request of the Project Director, an updated Project Schedule to the Project Director indicating the manner in which Design-Builder will achieve the Contract Times. Design-Builder's failure to submit an updated Project Schedule may, at the Project Director's discretion, constitute a material breach of this Agreement. Design-Builder shall take all action necessary to restore progress by working the hours, including night shifts and lawful overtime operations as necessary, to achieve Date of Substantial Completion within the Contract Time.

8.1.6 Except in connection with safety or protection of persons or the Work or property at the Project Site or adjacent to the Project Site, and except as otherwise indicated in the Contract Documents, all Work at the

Project Site will be performed Monday through Saturday between the hours of 7:00 a.m. and 7:00 p.m. Design-Builder shall not perform Work between 7:00 p.m. and 7:00 a.m., on a Sunday, or on a Legal Holiday, without giving the Project Director three days' prior written notice and receiving written consent of the Project Director, which consent shall not unreasonably be withheld.

8.2 Delays and Extensions of Time

8.2.1 Design-Builder may request extension of Contract Time for a delay in performance of Work only to the extent arising from: (a) Uncontrollable Circumstances; (b) City-directed Modifications; or (c) solely to the extent provided in Section 2.5, a written order from the Project Director to suspend, delay or interrupt all or any part of the Work (each a "Relief Event Delay"). Nothing in this Section 8.2 shall be interpreted to limit the requirements of Section 7.4.4 or otherwise permit the Design-Builder to pursue any further Claim concerning a Change Order following execution of the same by Design-Builder.

8.2.2 During the performance of Final Design and Construction, Design-Builder shall not be entitled to any cost relief for the first 90 days of aggregate delay attributable to any single or series of Relief Event Delays, as determined on a cumulative basis over the course of the Final Design and Construction. Thereafter, cost relief for Relief Event Delays occurring during the performance of Final Design and Construction shall be limited to a reasonable and equitable Base Guaranteed Maximum Price Adjustment, which shall not exceed the direct and unavoidable extra costs associated with the Relief Event Delay, as determined in accordance with Exhibit F.

8.2.2.1 The Design-Builder agrees that any float in the Project Schedule is a resource available to both parties to deal with unforeseen circumstances, including Relief Event Delays, and that no cost relief shall be provided for delays that eliminate float but do not otherwise impact the ability of the Design-Builder to achieve Substantial Completion or Final Completion within the Contract Times.

8.2.2.2 The Design-Builder's entitlement to cost relief for Relief Event Delays shall be limited to the extent of any concurrent delay by the Design-Builder or to the extent performance was, or would have been, suspended, delayed, or interrupted by another cause for which Design-Builder is responsible.

8.2.3 Design-Builder may request and may be entitled to an extension of Contract Time for delay only if:

1. Design-Builder demonstrates that a Relief Event Delay has occurred and, subject to the time impact analysis requirements of Exhibit G, the impact of the Relief Event Delay on the critical path of planned Work in the Project Schedule, as updated, maintained and revised by the Design-Builder in accordance with the Contract Standards;
2. the delay was not foreseeable by the Design-Builder and would not have been foreseen by a reasonably experienced contractor as of the Baseline Date;
3. the Design-Builder, in view of all circumstances, exercised reasonable efforts to avoid the delay;
4. the delay was not caused by the Design-Builder or any DB-Related Entity; and
5. Design-Builder can fully document and prove all of the foregoing.

8.2.4 Claims relating to Contract Time must be made in accordance with Section 4.4

8.2.5 Claims for extending or shortening Contract Time are based on written notice promptly delivered by Design-Builder to the Project Director. A Claim must accurately describe occurrence generating the Claim, and a statement of probable effect on progress of the Work.

8.2.6 Claims for extension of Contract Time are considered only when a Claim is filed within the time limits stated in Section 4.4.4.

8.2.7 Written notice of a Claim must be accompanied by claimant's written statement that adjustment claimed is entire adjustment to which claimant is entitled as a result of the occurrence of the event. When the Parties cannot agree, Claims for adjustment in Contract Time are determined by City Engineer in accordance with Section 4.5.

8.2.8 Adjustments to Contract Time may be accomplished only by Change Order.

Article 9 – Payments and Completion

9.1 Application for Payment

9.1.1 Ten days before submittal of the first Application for Payment for any Phase, Design-Builder shall submit to the Project Director an updated Schedule of Values accurately allocating the Guaranteed Maximum Price for such Phase to the various portions of the Work under such Phase, prepared in the form and supported by the data as the Project Director may

require to substantiate its accuracy. The Schedule of Values shall contain, at a minimum, separate line items for the close out of the Work for such Phase, the delivery of record "as-built" drawings, delivery of operation and maintenance manuals, delivery of warranty documents, and final cleanup. The Schedule of Values shall be balanced and not contain any "front end loading." The Schedule of Values, as approved by the Project Director, shall be used as a basis for approval of Design-Builder's Applications for Payment. The City shall have no obligation to make any payment hereunder prior to approval of the Schedule of Values.

9.1.2 Design-Builder shall submit Applications for Payment to the Project Director each month on a form acceptable to the Project Director in accordance with the Schedule of Values. Each Application for Payment shall indicate percentages of completion of each portion of the Work listed in Schedule of Values as of the end of the period covered by the Application for Payment. The period covered by each Application for Payment shall be one calendar month ending on the last day of the month.

9.1.3 Each Schedule of Values submitted with an Application for Payment shall include the originally established value for each Work classification line item or Subcontract and shall identify, by the addition of new data rows immediately below the previously accepted data rows, any revisions to the costs or cost estimates for each Work classification or Subcontract. The format and tracking method of the original Schedule of Values and of all updates shall be subject to approval by the Project Director. At all times, the estimated cost of performing the uncompleted and unpaid portion of the Work, including Design-Builder's Fee, shall not exceed the unpaid balance of the Guaranteed Maximum Price, less retainage on Work previously completed.

9.1.4 If previously unpaid and owing to Design-Builder, the Preliminary Services Fee shall be identified separately in each Application for Payment.

9.1.5 Design-Builder shall deliver to the Project Director three copies of each itemized Application for Payment in such detail as is required by the Project Director. Applications for Payment must be supported by such substantiating data as the Project Director may require and shall reflect retainages as provided in the Contract Documents. The Application for Payment must be sworn to and notarized.

9.1.6 Before submitting the next Application for Payment (and with the Application for Final Payment), Design-Builder shall submit any evidence required by the Project Director to verify the Cost of the Work and

to demonstrate that the cash disbursements already made by Design-Builder on account of the Cost of the Work are equal to or exceed (1) progress payments already received by Design-Builder; less (2) that portion of those payments attributable to Design-Builder's Fee; plus (3) payrolls for the period covered by the most recent Application for Payment; less (4) retainage provided for in the Contract Documents applicable to prior progress payments. This documentation of the most recent Application for Payment, if required by the Project Director, shall have a summary sheet (in two copies) that descriptively itemizes all expenses and individuals. No payment is required to be made for Work for which Design-Builder fails to provide required documentation.

9.1.7 Each Application for Payment shall be based upon the Cost of the Work and the most recent Schedule of Values.

9.1.8 Applications for Payment shall show the Cost of the Work actually incurred by Design-Builder through the end of the period covered by the Application for Payment and for which Design-Builder has made or intends to make actual payment prior to the next Application for Payment and the percentage completion of each portion of the Work as of the end of the period covered by the Application for Payment. The percentage completion shall be the lesser of (1) the percentage of that portion of the Work that has actually been completed or (2) the percentage obtained by dividing (a) the Cost of the Work that has actually been incurred by Design-Builder on account of that portion of the Work for which Design-Builder has made or intends to make actual payment prior to the next Application for Payment by (b) the share of the Guaranteed Maximum Price allocated to that portion of the Work in the Schedule of Values.

9.1.9 Each Application for Payment, including the Application for Final Payment shall constitute a certification by Design-Builder to City that the Work has progressed to the point indicated and the Work represented has actually been performed; the quality of the Work covered in the Application for Payment is in accordance with the Contract Documents; Design-Builder is entitled to payment in the amount requested; Design-Builder remains capable of performing the Work to completion; and Design-Builder is current in payments to Design Subconsultants, Subcontractors and Suppliers.

9.1.10 Design-Builder shall comply with the prompt payment requirements of Chapter 2251 of the Texas Government Code. Design-Builder shall pay each of its Design Subconsultants, Subcontractors or Suppliers, upon receipt of payment from City, out of

the amount paid to Design-Builder on account of such DB-Related Entity's work, the amount to which such DB-Related Entity is entitled in accordance with the terms of the applicable Subcontract. Design-Builder shall, by the terms of each Subcontract, require each DB-Related Entity to make payments to its sub-subcontractors in similar manner. City shall have no obligation to pay or to be responsible in any way for payment to any Design Subconsultant, Subcontractor or Supplier. Evidence satisfactory to the Project Director of payments made to other DB-Related Entities for the month preceding the month for which the Application for Payment is submitted must accompany each Application for Payment on a form approved by the Director of the Mayor's Office of Business Opportunity.

9.1.11 With each Application for Payment, Design-Builder shall submit a certified "waiver and release." The waiver and release shall state: "In consideration for the payment received, Design-Builder waives all claims of every sort against City arising out of the Work performed through the effective date of the Application for Payment, except for retainage and such claims as have been properly submitted in accordance or claims that can be made timely within the requirements of the Contract Documents."

9.1.12 Retainage shall be five percent (5%) of the total of (a) the Cost of the Work and (b) Design-Builder's Fee. City shall be entitled to withhold retainage from all Applications for Payment by Design-Builder. Retainage is not held by City for the benefit of any others and shall be deemed amounts not yet earned by or owed to Design-Builder.

9.1.13 Design-Builder shall not receive payments from City for any amounts Design-Builder retains from any other DB-Related Entity, and Design-Builder shall immediately return to City any amounts paid to Design-Builder on behalf of any other DB-Related Entity which Design-Builder does not pass on as payment before the next Application for Payment. In the event City withholds all or any portion of the Design-Builder's payments under this Section or under Section 9.4, City shall provide specific written accounting for same and shall allocate specific amounts for each reason justifying withholding. Such explanation shall be provided at the time payments would otherwise be due and sums withheld shall be paid when each such reason for withholding same has been cured to the reasonable satisfaction of the City.

9.1.14 Materials and services utilized in the construction of the Project may be exempted from state and local taxes. Design-Builder is responsible for taking full advantage of all tax exemptions

applicable to the Project. City will deduct from the Applications for Payment and from the Request for Final Payment any taxes paid for materials or services that were entitled to tax exemption.

9.1.15 The Design-Builder is subject to the assessment of liquidated damages and deductions against payments as provided in the Contract Documents. Amounts assessed as liquidated damages, and other amounts to which City is entitled by way of setoff or recovery, may be deducted from any monies otherwise due Design-Builder. The deductions of such damages or other amounts from any monies unpaid, otherwise due, or to become due shall be in addition to retainage under Section 9.1.12. City also has the discretion to allow liquidated damages to accrue without collecting and by doing so does not waive any rights to collect them at a later time.

9.1.16 Design-Builder's records shall be kept on the basis of generally accepted accounting principles in accordance with cost accounting standards issued by the Federal Office of Management and Budget Cost Accounting Standards Board consistently applied and organized by each Application for Payment period.

9.2 Certificates for Payment

9.2.1 Prior to issuing each Application for Payment under Section 9.1, Design-Builder shall submit a "Draft" Application for Payment that is valid and has all required documentation no later than the 25th of the same month with Work projected through the end of the month. Within five (5) days of receipt of the Draft, the Project Director shall review the Draft and provide the Design-Builder with any adjustments to the progress of the Work or amount requested, subject to the terms and conditions of the Contract Documents. Design-Builder shall make agreed to corrections to the Draft and submit to the City a "Final" Application for Payment that is valid and has all required documentation within five (5) days from receipt of the Project Director's adjustments. City shall make payment to Design-Builder in accordance with Section 9.5. If Project Director holds all or part of a Final Application for Payment or otherwise refuses to issue a Certificate for Payment, the Project Director will issue a written explanation apportioning the amount withheld to each such cause.

9.2.2 Unless otherwise provided in the Contract Documents, payment for completed Work and for properly stored materials and equipment is conditioned upon compliance with procedures

satisfactory to and agreed to by Project Director to protect City's interests. Procedures will include applicable insurance, storage, and transportation to the site (with suitable on-site storage and protection) for materials and equipment stored off site and proper documentation for such delivered materials and equipment, including certified copies of invoices and freight bills. Design-Builder is responsible for maintaining materials and equipment until the date specified in Section 3.1.7. Design-Builder must obtain approval from the Project Director for authorization to bill for stored materials in advance of the request for payment, which approval may be conditioned on establishment and compliance with satisfactory procedures under this Section.

9.2.3 Design-Builder shall document its use of Ultra Low Sulfur Diesel Fuel by providing invoices and receipts evidencing use by all DB-Related Entities.

9.3 Computations of Certificates for Payment

9.3.1 Subject to the provisions of the Contract Documents, the amount of each Certificate for Payment is calculated as follows:

1. Take that portion of the Guaranteed Maximum Price for a Phase properly allocated to completed Work for such Phase based upon the percentage completion of the Work.
2. Add the Design-Builder's Fee.
3. Subtract the amount of retainage and such other amounts as City is entitled to withhold.
4. Subtract the aggregate of the previous payments made by City.
5. Subtract the shortfall, if any, indicated by Design-Builder in the documentation required to substantiate prior Applications for Payment or Design-Builder's payment of Costs of the Work covered by previous payments, or resulting from errors subsequently discovered by Project Director in such documentation.
6. Subtract amounts, if any, for which City has withheld or nullified an Application for Payment.

9.4 Decisions to Withhold Certification

9.4.1 In addition to any right of the City to deduct from or withhold payment under Section 9.1, the Project Director may decline to issue a Certificate for Payment and may withhold payment in whole or in part to the extent reasonably necessary to protect City if, in the Project Director's opinion, there is reason to believe that:

1. nonconforming Work has not been remedied;
2. the Work cannot be completed for the unpaid balance of the Guaranteed Maximum Price due to Design-Builder's failure to comply with the Contract Documents;

3. there is damage to City or another contractor for which the Design-Builder is liable hereunder;
4. a third-party claim subject to the Design-Builder's indemnity obligations hereunder has been filed in court, in arbitration, or otherwise;
5. Design-Builder has failed to make payments to any other DB-Related Entity in accordance with the applicable Subcontract and the Contract Documents;
6. the Work covered by the Application for Payment (or any previous Application for Payment) does not comply with the Contract Documents;
7. The payment request has insufficient documentation to support the amount of payment requested or Design-Builder has otherwise failed to provide all information required hereunder in respect of the Application for Payment;
8. Design-Builder has failed to obtain, maintain or renew insurance coverage as required by the Contract Documents;
9. an Event of Default has occurred under the Contract Documents; or
10. any amount previously paid was the proper subject of a withholding hereunder.

9.4.2 When the above reasons for withholding a Certificate for Payment are removed, certification will be made for amounts previously withheld.

9.4.3 The Project Director may decline to issue a Certificate for Payment and may withhold request for payment in whole or in part upon failure of Design-Builder to submit the initial Project Schedule or any Progress Report, as required in the Contract Documents.

9.4.4 City shall at any time during regular business hours have the right to inspect and copy the books and records (however kept) of Design-Builder for verification of Work done, costs, bids, estimates, markups, payments due, amounts claimed, obligations owed Subcontractors or Suppliers, or any other aspect of Design-Builder's obligations as they relate to the Project. At the Project Director's request, Design-Builder, shall promptly provide evidence satisfactory to City of Design-Builder's compliance with the Contract Documents. Design-Builder shall require its Subcontractors and Suppliers to comply with this Section, and similarly require their sub-subcontractors and Suppliers of any tier, to comply with this Section.

9.5 Progress Payments

9.5.1 The City will make payment, in an amount certified by the Project Director, within 20 days after

the Project Director has issued a Certificate for Payment. The Project Director will issue a Certificate of Payment or indicate in writing to the Design-Builder its reasons for withholding payment within 10 days following receipt of a Final Application for Payment under Section 9.2.1.

9.5.2 A Certificate for Payment, a progress payment, or partial or entire use or occupancy of the Work by City, does not constitute acceptance of Work that is not in accordance with the Contract Documents.

9.5.3 The City's standard payment term is to pay 30 days after receipt of invoice or receipt of goods or services, whichever is later, according to the requirements of the Texas Prompt Payment Act (Tx. Gov't Code, Ch. 2251). However, the City will remit payment in less than 30 days after receipt of an Application for Payment in return for an early payment discount from the Design-Builder as follows:

- Payment Time - 10 Days: 2% Discount
- Payment Time - 20 Days: 1% Discount

1. The Design-Builder may elect not to offer a discount for early payment and the City will remit payment as required by the Texas Prompt Payment Act.
2. In the event that the Design-Builder offers a discount for early payment and the City fails to make a payment according to the early payment schedule above, but does make the payment within the time specified by the Prompt Payment Act, the City shall not receive the discount, but shall pay no other penalty. When the payment date falls on a Saturday, Sunday, or Legal Holiday, payment may be made on the following business day and the City shall remain entitled to the early payment schedule discount.

9.6 Date of Substantial Completion

9.6.1 The Design-Builder shall prepare and submit to the City for its approval a detailed Commissioning and Acceptance Testing Plan in accordance with the requirements of Exhibit G. Design-Builder shall not commence performance of an Acceptance Test prior to satisfaction of all pre-conditions specified in Exhibit G.

9.6.2 When Design-Builder considers that a Phase is substantially complete, Design-Builder shall prepare and submit to the Project Director a comprehensive punch list of items to be completed or corrected. Failure to include an item on the punch list does not alter the responsibility of Design-Builder to comply with the Contract Documents.

9.6.2.1 By submitting the punch list to the Project Director, Design-Builder represents that work on the punch list will be completed within 90 days following the Date of Substantial Completion.

9.6.2.2 In no event shall the punch list contain any incomplete items necessary for the City to commence operating the Phase in accordance with the Operations and Maintenance Manual. The City shall have the right to approve the punch list in its discretion.

9.6.3 Substantial Completion of a Phase shall be deemed to have occurred only when all of the following conditions have been satisfied:

1. Design-Builder has submitted and the Project Director has approved in writing, such approval not to be unreasonably withheld or delayed, a certification by the Design-Builder that construction of the Phase, excepting items on the approved punch list, is complete and in all respects is in compliance with this Agreement;
2. Design-Builder and the Project Director have agreed in writing upon the punch list (or, if they are unable to agree, the Project Director shall have prepared and issued the punch list to the Design-Builder within 30 days of the Design-Builder having submitted its proposed punch list to the Project Director);
3. Design-Builder has delivered to the Project Director written certification from the equipment manufacturers (including information technology systems and instrumentation and controls) that all major items of machinery and equipment included in the Phase have been properly installed and tested in accordance with the manufacturers' recommendations and requirements;
4. Design-Builder shall be in possession of, and shall have delivered to the Project Director, copies of the warranties of all machinery, equipment and fixtures included in the Phase, together with copies of all related operating manuals supplied by the equipment supplier;
5. Design-Builder has delivered to the Project Director and the Project Director has approved in writing, such approval not to be unreasonably withheld or delayed, the Operations and Maintenance Manual in accordance with Exhibit G;
6. Design-Builder has submitted and the Project Director has approved in writing, such approval not to be unreasonably withheld or delayed, a certification by the Design-Builder

that all training required to be completed under Exhibit G prior to the Date of Substantial Completion has been completed in accordance with the Contract Standards;

7. Design-Builder shall have completed the Acceptance Tests and demonstrated compliance with all applicable Acceptance Standards, as evidenced by all required test reports, in accordance with Exhibit G;
8. All Governmental Approvals required for the occupancy and continued operations and maintenance of the Phase by the City have been obtained and are in full force and effect; and
9. Design-Builder shall have certified that there is no Event of Default by the Design-Builder existing under this Agreement, or event which with the giving of notice or the passage of time would constitute an Event of Default by the Design-Builder hereunder.

9.6.4 Project Director will inspect the Work following notice from Design-Builder, evaluate Design-Builder's certifications and test reports required under Section 9.6.3, and determine whether Substantial Completion has occurred. If Project Director's inspection reveals that Substantial Completion has not yet occurred, Design-Builder shall complete or correct the deficiencies and request another inspection by the Project Director. Project Director will make a determination as to the achievement of Substantial Completion within 60 days following receipt of all certifications and test reports required by Section 9.6.3. If Project Director disagrees that Substantial Completion has been achieved, Project Director will provide written notice as to what remains before Substantial Completion is achieved (but Project Director shall not be prohibited from identifying other deficiencies later). Disputes concerning the achievement of Substantial Completion will be resolved in accordance with Section 4.4 and Section 4.5.

9.6.5 Project Director will not be required to issue a Certificate of Substantial Completion for any Phase of the Work until all conditions specified in Section 9.6.3 have been satisfied by Design-Builder. If Design-Builder, in conducting an Acceptance Test, does not successfully meet the Acceptance Standards, Design-Builder shall, at its sole cost and expense, take all action necessary (including making all capital investments, improvements or modifications, repairs and replacements and operating and management practices changes) in order for the Project Facilities to comply with the Acceptance Standards and will re-perform the Acceptance Test in accordance with Exhibit G. Design-Builder shall be responsible for

operating and maintaining the Project Facilities included in the Phase until the Date of Substantial Completion.

9.6.6 When the Project Director agrees that a Phase of the Work has achieved Substantial Completion, Project Director will prepare a Certificate of Substantial Completion that incorporates the punch list in Section 9.6.2 and establishes:

1. Date of Substantial Completion;
2. responsibilities of the Parties for security, maintenance, heating, ventilating and air conditioning, utilities, damage to the Work, and insurance;
3. the date the City will occupy the Project Facilities and assume responsibility for the operations and maintenance of the Project Facilities; and
4. the date by which Design-Builder shall complete all items on punch list to be corrected or completed accompanying the certificate, which will be 90 days following Date of Substantial Completion.

9.6.7 The Project Warranties shall commence on the Date of Substantial Completion of each Phase unless otherwise provided by Project Director in Certificate of Substantial Completion. Project Warranties shall not commence on items not yet completed until the Date of Final Completion.

9.6.8 Design-Builder shall complete or correct all items on the approved punch list within 90 days following Date of Substantial Completion. If Design-Builder fails to do so, Project Director may issue a Notice of Noncompliance and exercise all of its legal remedies under the Contract Documents.

9.6.9 Immediately prior to the review of a portion of the Work for Substantial Completion, Design-Builder shall remove all waste materials, rubbish, Design-Builder's tools, construction equipment, machinery and surplus materials from the area to be inspected. Design-Builder shall also remove all protective coatings, temporary work, barriers and other protective devices.

1. Finished spaces that are to be inspected shall be cleaned as required to remove all stains, dirt and dust. Glass shall be cleaned on both faces, and carpet shall be vacuumed.
2. Unfinished spaces such as mechanical and electrical equipment rooms that are to be inspected shall be "broom clean."

3. Mechanical work such as duct work, unit heaters, finned tube radiation and its covers, air conditioning units, grilles and registers shall be cleaned as required to remove all stains, dirt and dust.
4. Electrical work shall be cleaned as necessary to remove all stains, dirt and dust.

9.6.10 Design-Builder shall maintain the Work in a clean condition until the Project Director determines the Date of Substantial Completion for the Phase. After the Date of Substantial Completion of the Phase, Design-Builder is responsible for removing waste materials, rubbish, dirt and dust caused by its continued operations.

9.6.11 Prior to City's occupancy of a Phase of the Work, Design-Builder shall do the following: (1) clean all spaces of the Work so that they are ready for City's occupancy without additional cleaning; (2) remove from the Project Site all temporary buildings or facilities, including temporary utilities, for that Work unless needed for other portions of the Work; (3) replace filters in air handling equipment according to the Specifications; and (4) replace burned out lamps. This obligation is in addition to and not by way of limitation of Design-Builder's obligation to prove the Project Facilities complete and ready to use in all respects by the time limits set forth in the Contract Documents.

9.6.12 After the Date of Substantial Completion of a Phase and upon application by Design-Builder and approval by Project Director if the Project Director considers the amount retained by the City under Section 9.1.12 to be in excess of the amount adequate for the protection of the City, and TWDB authorizes the release of retainage, City may make payment to the Design-Builder of all or part of such excess amount, as determined in the sole discretion of the Project Director; provided, however, that such payment shall not exceed 50% of the retainage withheld by the City from all prior progress payments under Section 9.1.12.

9.6.13 Design-Builder shall be responsible for all Transition Services specified in Exhibit G during the period commencing on the Date of Substantial Completion and ending on the Date of Final Completion.

9.7 Final Completion and Final Payment

9.7.1 Design-Builder shall review the Contract Documents and inspect the Work prior to Design-Builder notification to Project Builder has inspected the Work and that the Work is complete in

accordance with the requirements of the Contract Documents.

9.7.2 Project Director will make final inspection within 15 days after receipt of Design-Builder's written notice and affidavit under Section 9.7.1. If Project Director finds the Work has been completed in accordance with the Contract Documents, Design-Builder shall submit the items set out in Section 9.7.4 and a final Application for Payment. Within 30 days of receipt of the items set out in Section 9.7.4, the Project Director may perform an audit to determine the accuracy of Design-Builder's accounting of the Cost of the Work and the Final Application for Payment. Project Director will, within 10 days thereafter, either notify the Design-Builder that the Design-Builder has not achieved Final Completion of the Phase as provided in Section 9.7.3 or issue a Certificate of Final Completion stating that to the best of Project Director's knowledge, information, and belief, the Work has been completed in accordance with the Contract Documents. If there is only one Phase, Project Director will recommend acceptance of the Work and recommend release of the remaining retainage by City Council and TWDB. If there is more than one Phase, the Parties shall confer upon the issuance of each Certificate of Final Completion to determine whether it is appropriate to seek City Council acceptance of the Work and City Council and TWDB authorization of release of the remaining retainage held for the particular Phase that is certified as complete. Failing mutual agreement of the Parties to seek City Council acceptance of the Work and City Council and TWDB authorization of release of the remaining retainage, City shall continue to hold the remaining retainage for the particular Phase until such time as the Parties mutually agree to seek City Council acceptance of the Work and City Council and TWDB authorization of release of the remaining retainage for such Phase.

9.7.3 Should Work be found not in compliance with requirements of the Contract Documents, Project Director will notify Design-Builder in writing of items of noncompliance. Upon inspection and acceptance of the corrections by Project Director, compliance with all procedures of Section 9.7.2, and Design-Builder's submission of the items set out in Section 9.7.4, Project Director will issue Certificate of Final Completion to Design-Builder as provided in Section 9.7.2.

9.7.4 Design-Builder shall submit the following items to Project Director before Project Director will issue a Certificate of Final Completion:

1. affidavit that payrolls, invoices for materials and equipment, and other indebtedness of Design-Builder connected with the Phase of the Work, less amounts withheld by City, have been paid or otherwise satisfied. If required by Project Director, Design-Builder shall submit further proof including waiver or release of lien or claims from any DB-Related Entity (which may be conditioned upon City making payment to Design-Builder);
2. certificate evidencing that insurance required by the Contract Documents to remain in force after final payment is currently in effect, will not be canceled or materially changed until at least 30 days written notice has been given to the Project Director ;
3. written statement that Design-Builder knows of no substantial reason that insurance will not be renewable to cover correction and warranty period required by the Contract Documents;
4. consent of Surety to final payment;
5. copies of record documents, maintenance manuals, tests, inspections, and approvals and deliver the required record documents that describe changes or deviations from the Contract Documents, which occurred during construction and that reflect the actual "as-built" conditions of the completed Work; and
6. compliance with Texas Accessibility Standards through state inspection of the Work, if required.

9.7.5 If Design-Builder fails to submit required items in Section 9.7.4 within 10 days of Project Director's inspection of the Work under Section 9.7.2 or Section 9.7.3, Project Director may, but is not obligated to:

1. proceed to City Council for acceptance of the Work, minus some or all of the items Design-Builder fails to submit under Section 9.7.4; and,
2. upon acceptance by City Council of the portion of the Work completed, either recommend final payment in accordance with Section 9.7.7 or request that City Attorney interplead the balance due to Design-Builder under the Agreement into the registry of a court of appropriate jurisdiction.

9.7.6 If remaining balance due for work not corrected is less than retainage stipulated in the Contract Documents, Design-Builder shall submit to Project Director written consent of Surety to payment of balance due for that portion of the Work fully completed and accepted, prior to certification of the payment. The payment is made under terms governing final payment, except that it does not constitute waiver of Claims.

9.7.7 The City will make final payment to Design-Builder within 30 days after the issuance of the Certificate of Final Completion by Project Director and acceptance of the Work by City Council, subject to limitations, if any, as stated in the Contract Documents. City is entitled to deduct from any payment any amounts owed by Design-Builder to City, including accrued liquidated damages.

9.7.8 Acceptance of final payment by Design-Builder shall constitute a waiver of all Claims, whether known or unknown, by Design-Builder, except those previously made in writing and identified by Design-Builder as unsettled at time of final Application for Payment.

Article 10 – Uncovering and Correction of the Work

10.1 Uncovering the Work

10.1.1 If a portion of the Work has been covered that Project Director has not specifically asked to observe prior to its being covered, Project Director may request to see such work and it must be uncovered by Design-Builder. If such work is in accordance with the Contract Standards, the costs of uncovering and covering such Work that qualify as Costs of the Work are charged to City by Change Order in accordance with Article 7. If such Work is not in accordance with the Contract Documents, Design-Builder shall be responsible for all costs of uncovering and covering the Work and shall correct the nonconforming Work promptly after receipt of Notice of Noncompliance to do so.

10.2 Correction of the Work

10.2.1 Design-Builder shall promptly remove Work rejected by Project Director as failing to conform to requirements of the Contract Standards, whether observed before or after the Date of Substantial Completion of a Phase and whether fabricated, installed, or completed.

10.2.2 Design-Builder bears the costs of correcting the rejected or nonconforming Work, including additional testing and inspections, and expenses made necessary thereby.

10.2.3 If Design-Builder does not proceed with correction of the nonconforming Work within the reasonable time fixed by Notice of Noncompliance, City may correct nonconforming work or remove nonconforming work and store salvageable materials and equipment at Design-Builder's expense. Design-Builder shall pay the costs of correction of

nonconforming work and removal and storage of salvageable materials and equipment to City. If Design-Builder does not pay costs of the correction or removal and storage within 10 days after written notice, City may sell the materials and equipment at auction or at private sale. City will account for proceeds thereof after deducting costs and damages that would have been borne by Design-Builder, including compensation for services of city's design consultant and necessary expenses. If the proceeds of sale do not cover costs that Design-Builder should have borne, Design-Builder shall pay the value of the deficiency to City.

10.2.7 Design-Builder shall pay the cost of correcting work originally installed by Design-Builder, City, or by Separate Contractors and damaged by Design-Builder's correction or removal of the Work.

10.3 Acceptance of Nonconforming Work

10.3.1 If Project Director prefers to accept Work which is not in accordance with requirements of the Contract Documents, Project Director may do so only by Modification, instead of requiring its removal and correction. Any such Modification shall adjust the Guaranteed Maximum Price by the amount agreed upon by the Parties as reflecting the reduction in value of the Work. The City shall have no obligation to accept non-conforming Work pursuant to this Section.

Article 11 – Miscellaneous Provisions

11.1 Governing Laws

11.1.1 This Agreement is subject to the laws of the State of Texas, the City Charter and Ordinances, the laws of the federal government of the United States, and all rules and regulations of any regulatory body or officer having jurisdiction.

11.1.2 Venue for any litigation relating to the Agreement is Harris County, Texas.

11.2 Successors

11.2.1 This Agreement binds and benefits the Parties and their legal successors and permitted assigns; however, this Section 11.2.1 does not alter the restrictions on assignment and disposal of assets set out in Section 11.3.1. This Agreement does not create any personal liability on the part of any officer or agent of City.

11.3 Business Structure and Assignments

11.3.1 This Agreement is a personal service contract for the services of Design-Builder, and Design-Builder's interest in this Agreement, duties hereunder and/or fees due hereunder may not be assigned or delegated to a third party, at law or otherwise, nor

may Design-Builder dispose of all or substantially all of its assets, without the prior written approval of the City in its sole discretion. Nothing in this Section, however, prevents the assignment of accounts receivable or the creation of a security interest as described in §9.406 of the Texas Business & Commerce Code. In the case of such an assignment, Design-Builder shall immediately furnish City with proof of the assignment and the name, telephone number, and address of the assignee and a clear identification of the fees to be paid to the assignee.

11.3.2 Any series, as defined by the TEX. BUS. ORG. CODE ANN., affiliate, subsidiary, or successor to which Design-Builder assigns or transfers assets shall join in privity and be jointly and severally liable under this Agreement.

11.4 Written Notice

11.4.1 All notices required or permitted by this Agreement must be in writing and must be effected by: (a) hand delivery; (b) registered or certified mail, return receipt requested; (c) facsimile with confirmation copy mailed to receiving Party; or (d) email with written evidence of receipt by the recipient, (provided that the signed original and evidence of receipt must be sent by mail within three days after such email is sent). Subject to the foregoing, notice is sufficient if made or addressed with proper postage to the address stated in the Agreement for each Party ("Notice Address"), faxed to the facsimile number stated in the Agreement for each Party or emailed to the email address stated in the Agreement for each Party. The notice is deemed delivered on the earlier of:

1. the date the Notice is actually received;
2. the third day following deposit in a United States Postal Service post office or receptacle; or
3. the date the facsimile or email is sent unless the facsimile or email is sent after 5:00 p.m. local time of the recipient and then it is deemed received on the following day.

Any Party may change its Notice Address, facsimile number, or email address at any time by giving written notice of the change to the other Party in the manner provided for in this Section at least 15 days prior to the date the change is effected.

11.5 Rights and Remedies

11.5.1 Duties and obligations imposed by this Agreement and rights and remedies available hereunder are in addition to and not a limitation of

duties, obligations, rights, and remedies otherwise imposed or available by law.

11.5.2 No act or failure to act by City or Design-Builder is a waiver of rights or duties afforded them under the Contract Documents, nor does the act or failure to act constitute approval of or acquiescence in a breach of this Agreement. No waiver, approval or acquiescence is binding unless in writing and, in the case of City, signed by Project Director.

11.6 Tests and Inspections

11.6.1 Without limiting any obligation under Section 3.23.3, Design-Builder shall give Project Director timely notice of the time and place where tests and inspections are to be made. Design-Builder shall cooperate with inspection and testing personnel to facilitate required inspections or tests.

11.6.2 City will employ and pay for services of an independent testing laboratory to perform inspections or acceptance tests required by the Contract Documents except:

1. inspections or tests covered by Section 11.6.3;
2. those otherwise specifically provided in the Contract Documents; or
3. costs incurred in connection with tests or inspections conducted pursuant to Section 10.2.2.

11.6.3 Design-Builder is responsible for and shall initially pay all costs in connection with inspection or testing required in connection with Project Director's acceptance of materials and equipment to be incorporated into the Work, or of materials, mix designs, or equipment submitted for approval prior to Design-Builder's purchase thereof for incorporation into the Work.

11.6.4 Neither observations by Project Director, nor inspections, tests, or approvals by others, relieves Design-Builder from Design-Builder's obligations to perform the Work in accordance with the Contract Documents.

11.6.5 If testing, inspection, or approval reveal failure of the portions of the Work to comply with requirements established by the Contract Documents, Design-Builder shall bear all costs made necessary by such failure, including those of repeated procedures and compensation for City's services and expenses.

11.7 Interest

11.7.1 No interest will accrue on late payments by City except as provided under Chapter 2251 of the Government Code.

11.8 Ownership of the Project Facilities

11.8.1 The Project Facilities shall be owned by the City at all times. The Design-Builder shall perform the Work as an independent contractor and shall not have any legal, equitable, tax beneficial or other ownership or leasehold interest in the Project Facilities. Additionally, as between the City and the Design-Builder, the City is and shall remain the owner of all Raw Water and Treated Water. The Design-Builder shall not use the Project Facilities for any purpose other than the purposes contemplated by this Agreement or to serve or benefit any Person other than the City.

11.9 Actions of the City in Governmental Capacity

11.9.1 Nothing in this Agreement shall be interpreted as limiting the rights and obligations of the City under Applicable Law in its governmental capacity (including police power actions to protect health, safety and welfare or to protect the environment), or as limiting the right of the Design-Builder to bring any action against the City, not based on this Agreement, arising out of any act or omission of the City in its governmental capacity

11.10 Affiliate Transactions

11.10.1 If any costs to be reimbursed by the City to the Design-Builder under this Agreement arise from a transaction between the Design-Builder and any Affiliate of the Design-Builder, the Design-Builder shall notify the City of the specific nature of the contemplated transaction, including the identity of the Affiliate, the nature of the work to be performed by the Affiliate and the anticipated cost to be incurred, before any such transaction is consummated or cost incurred. The Design-Builder shall not enter into any such transaction, nor incur any such cost, absent the written approval of the City in its sole discretion. Costs incurred in contravention of this Section will not be reimbursable by the City to the Design-Builder.

11.11 Contract Administration

11.11.1 The Parties recognize that a variety of contract administrative matters will routinely arise throughout the performance of this Agreement. These matters will by their nature involve requests, notices, questions, assertions, responses, objections, reports, claims, and other communications made personally, in meetings, by phone, by mail and by electronic and computer communications. The purpose of this Section is to set forth a process by which the resolution of the matters at issue in such communications, once resolution is reached, can be formally reflected in the common records of the

parties so as to permit the orderly and effective administration of this Agreement.

11.11.2 The principal formal tool for the administration of routine matters arising under this Agreement between the Parties that do not require an Amendment shall be a "Contract Administration Memorandum." A Contract Administration Memorandum may be prepared, once all preliminary communications have been concluded, to evidence the resolution reached by the City and the Design-Builder as to matters of interpretation and application arising during the course of the performance of their obligations hereunder. Such matters may include, for example: (a) issues as to the meaning, interpretation or application of this Agreement in particular circumstances or conditions; (b) calculations required to be made; (c) notices, waivers, releases, satisfactions, confirmations, further assurances, consents and approvals given hereunder; and (d) other similar routine contract administration matters.

11.11.3 Either Party may request the execution of a Contract Administration Memorandum. When resolution of the matter is reached, a Contract Administration Memorandum shall be prepared by or at the direction of the Project Director reflecting the resolution. Contract Administration Memoranda shall be serially numbered, dated, signed by the contract representatives of the Parties, and, at the request of the Project Director, co-signed by a senior corporate representative for the Design-Builder. The City and the Design-Builder each shall maintain a parallel, identical file of all Contract Administration Memoranda, separate and distinct from the Amendments and all other documents relating to the administration and performance of this Agreement.

11.11.4 Executed Contract Administration Memoranda shall serve to guide the ongoing interpretation and application of the terms and conditions of this Agreement. Any material change, alteration, revision or modification of this Agreement, however, shall be effectuated only in accordance with Section 11.16.1.

11.12 Independent Contractor

11.12.1 Design-Builder recognizes that it is engaged as an independent contractor and acknowledges that City will have no responsibility to provide transportation, insurance or other fringe benefits normally associated with employee status. Design-Builder, in accordance with its status as an independent contractor, covenants and agrees that it shall conduct itself consistent with such status that it will neither hold itself out as nor claim to be an officer, partner, employee or agent of City by reason hereof, and that it will not by reason hereof make any claim, demand or application to or for any right or privilege

applicable to an officer, partner, employee or agent of City, including unemployment insurance benefits, social security coverage or retirement benefits. Design-Builder hereby agrees to make its own arrangements for any of such benefits as it may desire and agrees that it is responsible for all income taxes required by applicable law

11.13 Design-Builder's Debt

IF DESIGN-BUILDER, AT ANY TIME DURING THE TERM OF THIS AGREEMENT, INCURS A DEBT, AS THE WORD IS DEFINED IN SECTION 15-122 OF THE HOUSTON CITY CODE OF ORDINANCES, IT SHALL IMMEDIATELY NOTIFY THE CITY CONTROLLER IN WRITING. IF THE CITY CONTROLLER BECOMES AWARE THAT DESIGN-BUILDER HAS INCURRED A DEBT, IT SHALL IMMEDIATELY NOTIFY DESIGN-BUILDER IN WRITING. IF DESIGN-BUILDER DOES NOT PAY THE DEBT WITHIN THIRTY (30) DAYS OF EITHER SUCH NOTIFICATION, THE CITY CONTROLLER MAY DEDUCT FUNDS IN AN AMOUNT EQUAL TO THE DEBT FROM ANY PAYMENTS OWED TO DESIGN-BUILDER UNDER THIS AGREEMENT, AND DESIGN-BUILDER WAIVES ANY RECOURSE THEREFOR.

11.14. Parties in Interest

11.14.1 Except as expressly provided in the Contract Documents by reference to this Section 11.14.1, this Agreement does not bestow any rights upon any third party, but binds and benefits the Parties only.

11.15. Entire Contract

11.15.1 This Agreement merges the prior negotiations and understandings of the Parties and embodies the entire agreement of the Parties. No other agreements, assurances, conditions, covenants, express or implied, or other terms of any kind, exist between the Parties regarding this Agreement.

11.16. Written Amendment

11.16.1 Changes to the Contract Documents that cannot be made by Modifications, must be made by written amendment, which will not be effective until approved by City Council.

11.17. Compliance with Laws

11.17.1 Design-Builder shall comply with the Americans with Disabilities Act of 1990 as amended (ADA) and Texas Architectural Barriers Act and all regulations relating to either statute. under the Contract Documents without further authorization.

11.17.2 Design-Builder shall comply with all applicable federal, state, and City laws, ordinances, rules and regulations. Nothing herein shall be construed to require that Design-Builder ensures that the contract documents are prepared in accordance with applicable laws.

11.18. Enforcement

11.18.1 City Attorney or designee will have the right to enforce all legal rights and obligations under the Contract Documents without further authorization.

11.19. Servability

11.19.1 If any part of this Agreement is for any reason found to be unenforceable, all other parts remain enforceable to the extent permitted by law.

11.20. Financial Condition

11.20.1 The Design-Builder shall furnish to the City, within 180 days after the end of each Design-Builder fiscal year, consolidating balance sheets and income statements for the Design-Builder attached to the audited year-end financial statements reported upon by the Design-Builder's independent public accountant. If applicable, the Design-Builder shall also furnish the City with copies of the quarterly and annual reports and other filings of the Design-Builder filed with the Securities and Exchange Commission. If the Design-Builder is not required to file quarterly reports with the Securities and Exchange Commission, the Design-Builder shall, if reasonably requested by the Project Director, provide the City with unaudited quarterly financial statements within 60 days following the end of each quarter based on the Design-Builder's fiscal year. If the Design-Builder is a joint venture, the Design-Builder shall provide all information required under this Section for each member of the joint venture entity. The City does not hereby assume any obligation to third parties in connection with doing business with Design-Builder.

11.20.2 The Design-Builder shall be responsible throughout this Agreement for monitoring the financial condition of any Surety and for making inquiries no less often than annually to confirm that each Surety maintains at least the minimum rating level specified in Exhibit H. In the event the rating of any Surety falls below such minimum level, or if any Surety is declared bankrupt or becomes insolvent or has the rights to do business in the State of Texas terminated, the Design-Builder shall promptly notify the City of such event and shall promptly take steps to ensure continued compliance with the requirement to maintain the Bonds in accordance with Exhibit H.

Article 12 - Termination of the Agreement

12.1 Termination by the City of Houston for Cause

12.1.1 Each of the following acts or omissions of Design-Builder or occurrences shall constitute an "Event of Default" under this Agreement:

1. Design-Builder's material failure to perform the Work in accordance with the Contract Standards, including refusal or failure to supply enough properly skilled workers or proper materials and equipment and failure to adhere to the Project Schedule, as the same may be adjusted from time to time in accordance with the Contract Documents;
2. Design-Builder disregards or fails to comply with Applicable Law;
3. Design-Builder's material breach of any duty or obligation of Design-Builder under the Contract Documents;
4. Design-Builder fails to maintain the Required Insurance or Bonds in accordance with the Contract Documents;
5. the City initiates debarment proceedings against the Design-Builder under Chapter 15 of the City of Houston Code of Ordinances at any time subsequent to the Effective Date; or
6. Design-Builder fails to utilize Ultra Low Sulfur Diesel Fuel, as required in Section 3.12.1.1.

12.1.2 If an Event of Default occurs, the Project Director may, at its option and without prejudice to any other rights or remedies which City may have, deliver a written notice to Design-Builder and Surety describing the Event of Default. No such Event of Default shall give the City the right to terminate this Agreement for cause under this Section unless:

1. the City has given prior written notice to the Design-Builder stating that a specified default has occurred which gives the City a right to terminate this Agreement for cause under this Section, and describing the default in reasonable detail; and
2. the Design-Builder has not initiated within a reasonable time (in any event not more than 20 days from the initial default notice) and continued with due diligence to carry out to completion all actions reasonably necessary to correct the default and prevent its recurrence.

If the Design-Builder shall have initiated and continued with due diligence to carry out to completion all actions required under item (2), above, the Event of Default shall not give the

City the right to terminate this Agreement for cause under this Section during such period of time (not more than 60 days from the initial default notice or such longer period as the Project Director may agree in his or her sole discretion) as the Design-Builder shall continue with due diligence to carry out to completion all such actions. If the Design-Builder fails to take the action required under item (2), above or otherwise fails to cure the Event of Default within 60 days from the initial default notice (or such longer period as the Project Director may establish under this Section), then the Project Director may deliver a second written notice to Design-Builder and Surety giving notice of the termination of this Agreement ("Notice of Termination").

12.1.3 Notwithstanding Section 12.1.2, the Project Director shall have the right to issue an immediate Notice of Termination for an Event of Default in the event the Design-Builder fails to achieve Substantial Completion of any Phase within 180 days following expiration of the applicable Contract Time. The Design-Builder acknowledges that the City has an immediate termination right under such circumstances and that the Design-Builder has no further right of notice or cure in such circumstances of default.

12.1.4 If the Project Director issues a Notice of Termination, then City may take possession of any completed Drawings and Specifications prepared by or for Design-Builder, exclude Design-Builder from the Project Site, and take possession of the Work and of all Design-Builder's tools, appliances, construction equipment and machinery at the Project Site and use the same to the full extent they could be used by Design-Builder (without liability to Design-Builder for trespass or conversion), incorporate in the Work all materials and equipment stored at the Project Site or for which City has paid Design-Builder but which are stored elsewhere, and finish the Work as City may deem expedient. In such case, Design-Builder shall not be entitled to receive any further payment until the Work is finished. When exercising any rights or remedies under this Section 12.1.4, City shall not be required to obtain the lowest price for the Work performed.

12.1.5 If the unpaid balance of the Guaranteed Maximum Price exceeds the costs of finishing the Work, including liquidated damages and other amounts due under the Contract, the balance will be for the account of and retained by City. If the costs of finishing the Work exceed the unpaid balance, Design-Builder shall, within 30 days of receipt of written notice setting out the amount of the excess

costs, pay the difference to City. The amount to be paid to City will be certified by Project Director in writing, and the Design-Builder's obligation for payment shall survive termination of the Agreement or termination of Design-Builder's performance under the Agreement. Termination of the Design-Builder for cause shall not relieve the Surety from its obligation to complete the Project.

12.1.6 The City's rights under this Section to issue a Notice of Termination and take action under Section 12.1.4 are not exclusive. If this Agreement is terminated by the City for an Event of Default by the Design-Builder, the City shall have the right to pursue a cause of action for actual damages and to exercise all other remedies which are available to it under this Agreement, under the Bonds and under Applicable Law. The Design-Builder shall not be entitled to any compensation for services provided subsequent to receiving any notice of termination for an Event of Default under this Section.

12.1.7 Termination by the City pursuant to this Section shall not relieve the Design-Builder or its Surety from liability for the liquidated damages provided for under this Agreement. The Parties acknowledge and agree that such liquidated damages are intended solely to compensate the City for costs and expenses associated with unexcused delay in the specific circumstances identified in the specific provisions providing for such liquidated damages and are not intended to liquidate all damages that the City is likely to suffer in the event of a Design-Builder Event of Default under this Section. Accordingly, the payment of any such liquidated damages by the Design-Builder shall not serve to limit or otherwise affect the City's right to pursue and recover damages under Section 12.1.5, except with respect to damages relating solely to the specific circumstances of unexcused delay for which liquidated damages are provided under this Agreement.

12.1.8 Nothing in this Section 12.1 shall serve to limit any other default termination right provided to the City under any other Contract Document.

12.1.9 If the City elects to terminate this Agreement pursuant to this Section 12.1 and it is later determined by a court of competent jurisdiction that the City lacked the right of termination under this Section 12.1, the Parties agree that the termination shall be treated as a termination for the convenience of the City under Section 12.2.

12.2 Termination by the City for Convenience

12.2.1 The Project Director may, without cause and without prejudice to any other rights or remedies of City, give Design-Builder and Surety a Notice of Termination with seven days written notice.

12.2.2 After receipt of City's Notice of Termination, and except as otherwise approved by the Project Director, Design-Builder shall conform to the requirements of Section 12.4.

12.2.3 Except as otherwise provided in the Agreement, after receipt of the Notice of Termination, Design-Builder shall submit to City its termination Claim, in forms required by the Project Director. The Claim will be submitted to City promptly, but no later than six months from the effective date of termination, unless one or more extensions are granted by the Project Director in writing. If Design-Builder fails to submit its termination Claim within the time allowed, in accordance with Section 12.2.4, the Project Director will determine, on the basis of available information, the amount, if any, due to Design-Builder because of termination, and the Project Director's determination is final and binding on the Parties. City will then pay to Design-Builder the amount so determined.

12.2.4 The Project Director will determine, on the basis of information available to the Project Director, the amount due, if any, to Design-Builder for the termination as follows:

1. Payment for all Work performed in accordance with the Contract Documents up to the date of termination determined in the manner prescribed for monthly payments in Article 9 and other applicable Contract Documents, except no retainage is withheld by City with respect to the terminated Work either for payment determined by percentage of completion or for materials and equipment delivered to the site, in storage or in transit.
2. Reasonable termination expenses that would qualify as Cost of the Work, including, to the extent they qualify as Costs of the Work, costs for settling and paying Subcontractor and Supplier claims arising out of termination of the Work under their respective Subcontracts and purchase orders, reasonable cost of preservation and protection of City's property after termination if required, and the cost of Claim preparation. Termination expenses do not include field or central office overhead, salaries of employees of Design-Builder or litigation costs (including, but not limited to, attorneys' fees).

No amount is allowed for anticipated profit or central office overhead on uncompleted work, or any cost or lost profit for other business of Design-Builder alleged to be damaged by the termination.

12.2.5 Design-Builder shall promptly remove from the site any construction equipment, tools, and temporary facilities not needed for Work not terminated, except the temporary facilities that the Project Director may wish to purchase and retain.

12.2.6 Design-Builder shall cooperate with the Project Director during the transition period.

12.2.7 City will take possession of the Work and materials delivered to the Project Site, in storage, or in transit, as of date or dates specified in the Notice of Termination, and will be responsible for maintenance, utilities, security, and insurance, as stated in Notice of Termination.

12.2.8 After the date of any termination under this Section, the City may at any time (but without any obligation to do so) take any and all actions necessary or desirable to continue and complete the Work so terminated, including entering into contracts with other contractors.

12.2.9 Nothing in this Section 12.2 shall serve to limit any other convenience termination right provided to the City under any other Contract Document.

12.3 Termination by Design Builder

12.3.1 Design-Builder may terminate this Agreement if the Work is stopped for a consecutive period of 90 days through no act or fault of Design-Builder, directly related to one of the following events:

1. issuance of an order of a court or other public authority having jurisdiction; or
2. act of government, such as a declaration of national emergency that makes material unavailable.

12.3.2 Design-Builder may terminate this Agreement if repeated suspensions, delays, or interruptions of the Work by City under Section 2.5 (excluding any suspension, delay or interruption due to Design-Builder Fault) constitute, in the aggregate, more than 100 percent of the total number of days scheduled for completion, or 120 days in any 365 day period, whichever is less.

12.3.3 Design-Builder may terminate this Agreement under the circumstances specified in Section 7.5.4 of the Agreement.

12.3.4 Design-Builder may terminate this Agreement solely to the extent specified in this Section 12.3. Prior to any termination of this Agreement by Design-Builder, Design-Builder shall deliver written notice to the Project Director describing the basis and reason for termination, giving the proposed termination date, and granting City a reasonable opportunity to respond and cure any City default or other circumstance before termination is effective.

12.3.5 If the Agreement is terminated pursuant to this Section 12.3, Design-Builder shall comply with the requirements of Sections 12.2.2 through 12.2.7

12.4 Obligations of Design Builder on Termination

12.1.1 Upon any termination of Design-Builder's right to perform this Agreement, Design-Builder shall, as applicable and subject to any written directions provided by the Project Director:

1. stop the Work on the date and to the extent specified in the Notice of Termination;
2. cease incurring any further obligations or liabilities pertaining to the Work and place no further orders or enter into any Subcontracts for materials, equipment or services;
3. suspend all orders and Subcontracts to the extent that they relate to performance of Work terminated;
4. assign to City, in the manner, at the times, and to the extent directed by the Project Director, all rights, title, and interest of Design-Builder, under any Subcontract and cancel or terminate any Subcontract that the City does not elect to have assigned to it, in accordance with the written instructions of the Project Director;
5. settle all outstanding liabilities and all claims arising out of the termination of supply orders and Subcontracts with approval of the Project Director;
6. promptly take all action as may be necessary, or as the Project Director may direct, for protection and preservation of property related to the Work, including materials, equipment, tools and facilities, and in which City has or may acquire an interest;
7. secure the Work in a safe state before leaving the Project Site, return all rented equipment, providing any necessary safety measures, shoring, or other devices;
8. clean up and remove all debris and trash from the Project Site;
9. vacate possession of the Project Site and turn possession over to the City;
10. promptly deliver a list of all supplies, materials, machinery, equipment, property or other pending items being fabricated or on order for delivery to the Project Site but not yet delivered

- or incorporated into the Work, and comply with the written instructions of the Project Director with respect to such matters;
11. deliver a complete copy of all books, notes, and records of the Design-Builder pertaining to the performance of the Agreement or planned construction or design activities;
 12. promptly provide a list of all files (and make available to the City for review or copying) all files pertaining to the Work, including any and all access and security codes, and including instructions and demonstrations that show how to open and modify such codes;
 13. promptly deliver complete copies of all Subcontracts to the City, together with a detailed report on the status of such Subcontracts (status of orders and work performed and not performed or delivered under each Subcontract); a record of proposals made and balances due under each Subcontract; any cancellation penalties pertaining thereto; and any further information required by the City, and furthermore assist the City in contacting such Subcontractors to verify such information or answer any questions of the City;
 14. promptly deliver and assign to the City all warranties or guarantees by any vendor, supplier, manufacturer, or subcontractor pertaining to the Project;
 15. promptly notify the City (in writing) of any Legal Proceedings against the Design-Builder pending or threatening relating to the Project;
 16. promptly assist the City in the modification to any of the insurance policies required under this Agreement, as appropriate or necessary by reason of the termination;
 17. make arrangements with its employees to avoid any "successor clauses" or other similar

- provisions with respect to salaries or benefits, to allow the City to enter into new employment or independent contractor agreements with employees of the Design-Builder deemed available or necessary by the City to complete (or correct defects) in the Work; and;
18. promptly take such other action and execute such documents as requested by the City, and to assist in the transition of the Work to the Surety or the City, or as reasonably deemed necessary or appropriate by the City, and avoid any action or conduct that would increase any expense or cost that would become an obligation or liability to the City unless requested or directed by the Project Director in writing.

12.5.2 With respect to any of the foregoing obligations that cannot reasonably be completed by the Termination Date, the Design-Builder shall complete such obligations as promptly as is practicable, but in no event later than 30 days following the Termination Date. Compliance with these obligations shall be conditions precedent to the payment of any sums otherwise due the Design-Builder by reason of the termination. If any Subcontracts are assigned to the City under this Section, the City shall not be directly liable to any Subcontractors for amounts owed to such parties for Work performed prior to termination, and the Design-Builder shall remain liable to any such parties for such amounts.

*END OF EXHIBIT D – COH FLOWDOWNS
DESIGN BUILD CONTRACTING*

COH Flowdown - Exhibit G – Work Requirements

Article 1 – Project Schedule

1.1 Purpose

The purpose of this Article 1 of Exhibit G is to set forth: (a) certain requirements pertaining to the achievement of Substantial Completion and Final Completion; (b) the liquidated damages payable for delays in achieving the Substantial Completion Dates; and (c) certain supplemental requirements for the development of the Project Schedule.

1.2 Commencement of Contract Time

1.2.1 Preliminary Service The Contract Time for the Preliminary Services begins on the Date of Commencement of the Work. The Project Director shall issue a Notice to Proceed with Component 1 Preliminary Services establishing the Date of Commencement of the Work for the Component 1 Preliminary Services within twenty-one (21) days following the Effective Date; provided that the Design-Builder has provided the Project Director with all documentation required under the Contract Documents prior to the commencement of Component 1 Preliminary Services within fourteen (14) days following the Effective Date. The Project Director shall issue a Notice to Proceed with Component 2 Preliminary Services establishing the Date of Commencement of the Work for the Component 2 Preliminary Services within twenty-one (21) days following the Component 2 Preliminary Services Amendment Date; provided that the Design-Builder has provided the Project Director with all documentation required under the Contract Documents prior to the commencement of Component 2 Preliminary Services within fourteen (14) days following the Component 2 Preliminary Services Amendment Date.

1.2.2 Final Design and Construction The Contract Time for Final Design and Construction begins on the Date of Commencement of the Work following the GMP Amendment Date. The Project Director shall issue a Notice to Proceed with Final Design and Construction establishing such Date of Commencement of the Work within twenty-one (21) days following the GMP Amendment Date; provided that the Design-Builder has provided the Project Director with all documentation required under the Contract Documents prior to the commencement of Final Design and Construction within fourteen (14) days following the GMP Amendment Date.

1.3 Substantial Completion

1.3.1 **Scheduled Substantial Completion Dates** - The Design-Builder shall achieve the Date of Substantial Completion of the Phase I Project Facilities by the Phase I Scheduled Substantial Completion Date and the Date of Substantial Completion of the Phase II Project Facilities by the Phase II Scheduled Substantial Completion Date. The requirements for the achievement of the Dates of Substantial Completion, which are applicable to each Scheduled Substantial Completion Date, are set forth in the General Conditions and include demonstration by the Design-Builder of compliance with the Acceptance Standards through the performance of Acceptance Testing.

1.3.2 **Operations Prior to Substantial Completion** - Without limiting any other obligation under the Contract Documents, the Design-Builder shall operate and maintain the Project Facilities during startup, Commissioning, and Acceptance Testing in accordance with all Applicable Law, including all Treated Water quality requirements and operator certification requirements. The Design-Builder's obligation to perform Acceptance Testing includes the obligation to obtain the approval of TCEQ to deliver Treated Water to the Water Systems. The Design-

Builder shall deliver Treated Water to the Water Systems during Acceptance Testing in accordance with Applicable Law

1.4 Liquidated Damages

- 1.4.1 Phase I Scheduled Substantial Completion Date - Subject to Section 1.4.3, the Design-Builder shall pay to the City delay liquidated damages for each day of delay in achieving the Date of Substantial Completion for the Phase I Project Facilities beyond the Phase I Scheduled Substantial Completion Date. The amount of such liquidated damages shall be:
 - 1.4.1.1. Fifty Thousand Dollars (\$50,000.00) per day for the first 90 days following the Phase I Scheduled Substantial Completion Date; and
 - 1.4.1.2. One Hundred Thousand Dollars (\$100,000.00) per day for each day thereafter.
- 1.4.2 Phase II Scheduled Substantial Completion Date - Subject to Section 1.4.3, the Design-Builder shall pay to the City delay liquidated damages for each day of delay in achieving the Date of Substantial Completion for the Phase II Project Facilities beyond the Phase II Scheduled Substantial Completion Date. The amount of such liquidated damages shall be:
 - 1.4.2.1 Fifty Thousand Dollars (\$50,000.00) per day for the first 90 days following the Phase II Scheduled Substantial Completion Date; and
 - 1.4.2.2 One Hundred Thousand Dollars (\$100,000.00) per day for each day thereafter.
- 1.4.3 Maximum Amount of Delay Liquidated Damages - The Design-Builder's aggregate liability for the payment of delay liquidated damages under Sections 1.4.1 and 1.4.2 shall not exceed Fifty Million Dollars (\$50,000,000.00).
- 1.4.4 Authorities as Third-Party Beneficiaries for Purposes of Liquidated Damages - The Design-Builder acknowledges the City's commitments to the Authorities under the Second Supplements and agrees that the Authorities will suffer damages in the event of a delay by the Design-Builder in achieving the Dates of Substantial Completion beyond the Scheduled Substantial Completion Dates. Without limiting anything set forth in Section 1.4.5, the Design-Builder acknowledges that such damages are an intended factor in the calculation of the amount of the liquidated damages hereunder and agrees that each of the Authorities are singularly and collectively third-party beneficiaries of the Design-Builder's obligation to pay liquidated damages under this Section 1.4. The Parties acknowledge and agree that this Section 1.4.4 is an express exception to the limitation on third-party rights under Section 11.14.1 of the General Conditions and a material inducement to obtain approval and funding of this Agreement by the Authorities in accordance with the Second Supplements. However, nothing in this Section 1.4.4 is intended to provide the Authorities with an independent right of action against the Design-Builder; it being understood that the City will be responsible for the enforcement of the rights of the Authorities under this Section in accordance with the Second Supplements.
- 1.4.5 Agreements Concerning Liquidated Damages - Each Party agrees that the actual damages of the City and the Authorities in each circumstance of unexcused delay contemplated under this Section 1.4 would be difficult or impossible to ascertain, and that the liquidated damages provided for in this Section 1.4 with respect to each such circumstance of unexcused delay do not fully compensate the City or the Authorities but are intended to help place the City and the Authorities in the same economic position as they would have been in had the unexcused delay not occurred. Such liquidated damages shall constitute the only damages payable by the Design-Builder to compensate the City and the Authorities for unexcused delays in achieving the Scheduled Substantial Completion Dates, as applicable, regardless of legal theory. This limitation, however, is not intended to limit any of the other remedies for breach specifically provided for under the Contract Documents, including the City's remedies associated with an Event of Default by the Design-Builder. The Parties acknowledge and agree that:

- 1.4.5.1 the additional remedies specifically provided for under the Contract Documents are intended to address harms and damages which are separate and distinct from those which the liquidated damages are meant to remedy;
- 1.4.5.2 the liquidated damages payable under this Section are not a penalty, are fair and reasonable and represent a reasonable estimate of fair compensation for the losses that may reasonably be anticipated from the circumstances of unexcused delay;
- 1.4.5.3 in recognition of the foregoing acknowledgments, the Design-Builder, the City and the Authorities are expressly estopped from arguing, and waive any rights they may have to argue, that the liquidated damages provided for herein are a penalty or that they are not enforceable; and
- 1.4.5.4 if the Design-Builder breaches its commitment under Section 1.4.5.3 and the liquidated damages under this Section are determined to be unenforceable, the Design-Builder shall be liable for the actual damages of both the City and the Authorities and Section 6.1 of Exhibit H shall not serve to limit the Design-Builder's liability for such damages in any respect.

1.5 Final Completion

The Design-Builder shall achieve Final Completion of the Project Facilities in accordance with the General Conditions within 90 days following the Date of Substantial Completion of the Phase II Project Facilities; provided however, that all punch list items pertaining to the Phase I Project Facilities shall be completed within 90 days following the Date of Substantial Completion of the Phase I Project Facilities. Each such deadline is subject to adjustment in accordance with the General Conditions. The Design-Builder recognizes that time is of the essence in the achievement of Final Completion and that the City shall be entitled to the recovery of damages from the Design-Builder for any loss resulting from the Design-Builder's failure to achieve Final Completion within the Contract Times, subject to the terms and conditions of the Contract Documents. The achievement of Final Completion will not limit the Design-Builder's obligations hereunder in respect of the Warranty Work or the Transition Services.

1.6 Project Schedule Requirements

- 1.6.1 **General** - Without limiting any other requirement of the Contract Documents, the Project Schedule shall show the sequence and interdependence of activities required for complete performance of all Work, including design development, procurement, construction, testing and commissioning. The Design-Builder shall develop the initial Project Schedule in accordance with Exhibit B and provide updates to the City in accordance with Exhibit D and any other applicable Contract Document.
- 1.6.2 **Detailed Network Diagram** - The Project Schedule shall include time-scaled network diagrams based on calendar days. The network diagrams shall be Critical Path Method ("CPM") precedence format and shall show the sequence and interdependence of activities required for complete performance of all items of Work ("Detailed Network Diagram"). A calendar shall be shown on all sheets along the entire sheet length. Each activity shall be plotted so that the beginning (and completion dates) of the activity can be determined graphically (by comparison) with the calendar scale. The Detailed Network Diagram shall provide sufficient detail and clarity of form and technique so that the Design-Builder can plan, schedule, and control the Work properly and the City can readily monitor and follow progress for all portions of the Work. The Design-Builder shall analyze the activities outlined in the Detailed Network Diagram with respect to normal manpower and equipment requirements to determine activity time durations in units of whole working days. Critical path activities shall be identified, including critical paths for interim completion dates. Milestone events shall be identified and connected to the appropriate activity, denoting its start or completion, as applicable. Each start milestone event shall restrain the start of all dependent activities. Further, all activities included in the scope of work associated with a completion milestone event must be finished before that milestone event can occur. Interfaces and dependencies

with preceding, concurrent, and follow-on work by others shall be included as milestone events.

- 1.6.3 **Seasonal weather conditions** - shall be considered and included in the planning and scheduling of all Work influenced by high or low ambient temperatures and/or precipitation to ensure completion of all Work within the Contract Times. Seasonal weather conditions shall be determined by an assessment of average historical climatic conditions based upon the preceding ten (10) year records published for the locality by the National Ocean and Atmospheric Administration (NOAA).

- 1.6.4 **Schedule Updates** - Each Project Schedule shall include the following elements

- 1.6.4.1 activity sort by preceding event number from lowest to highest, and then in the order of the following event number;
- 1.6.4.2 activity sort by early start for next 60 working days, then in order of preceding event number;
- 1.6.4.3 activity sort by late finish for next 60 working days, then in order of preceding event number; and
- 1.6.4.4 milestone status report to include current status of each milestone event.

Logic calculation configurations should be consistent throughout the Project. The Design-Builder shall use retained logic option, calculate start to start lag by using early start option, calculate early start using contiguous activity duration option, and calculate total float using most critical option.

- 1.6.5 **Progress Reports** - Prior to each weekly progress meeting, the Design-Builder shall gather the necessary information required to reflect progress to date and a minimum two week look-ahead schedule. The Project Schedule, including draft updates and a minimum two week look-ahead schedule, shall be available for review at the meeting with all information available as of the cut-off date established by the Project Director. The Design-Builder shall come to the update meetings with the above data prepared in advance to provide, as of the end of the updating period, a complete and accurate report of current progress, showing plans to continue the Work to meet completion dates. Without limiting any other requirement of the Contract Documents, each Monthly Progress Report during Final Design and Construction shall include:

- 1.6.5.1 For activities started and/or completed during the previous period: actual start and actual completion dates, number of work days, number of shifts, crew sizes by craft, and major construction equipment (as determined with the approval of the Project Director) used to accomplish the activity;
- 1.6.5.2 For activities begun but not yet completed: the actual start date, physical percentage complete, the remaining duration, and the estimated completion date;
- 1.6.5.3 For activities not yet started: estimated start dates, revised duration, and estimated completion dates with explanation of variances from current schedule if applicable;
- 1.6.5.4 For any Modifications: revised activities and durations, where required;
- 1.6.5.5 A Project Schedule update narrative with transmittal letter, description of problem areas, identification of current and anticipated delays, approved construction sequence changes, status of pending items, anticipated process interfaces and shutdowns, and construction completion status;
- 1.6.5.6 A cost variance and cost performance index (CPI);
- 1.6.5.7 A schedule variance and schedule performance index (SPI);
- 1.6.5.8 A description of issues impacting the Project Schedule or budget if the CPI or SPI is less than 0.95; and

- 1.6.5.9 A description of Design-Builder's plan to complete the Work within the budget and schedule if the total contract CPI or SPI is less than 0.95.

- 1.6.6 **Time Impact Analysis** - Whenever the Design-Builder receives a request for proposal regarding a potential Change Order or delays are experienced that may impact the critical path, Design-Builder shall submit a "Time Impact Analysis" illustrating the influence of each change or delay on the current Project Schedule completion dates. The Design-Builder shall include a Time Impact Analysis in any Design-Builder proposal required under Section 7.4.1 of the General Conditions if required by the Project Director. The Design-Builder shall provide any other Time Impact Analysis required under this Section 1.6.6 with the next required update of the Project Schedule that is at least 15 days following the date the delay is recognized. Each Time Impact Analysis shall include a fragment network analysis ("fragnet"), demonstrating how the Design-Builder proposes to incorporate the change or delay into the Detailed Network Diagram. Additionally, the analysis shall demonstrate the time impact based on the date that the Design-Builder was notified of the authorization of the change or the date that the delay began, the status of construction at that point in time, and the event time computation of all affected activities. The event items used in the analysis shall be those included in the latest updated copy of the detailed progress schedule or as adjusted by mutual agreement. Each Time Impact Analysis shall be submitted in triplicate. In cases in which the Design-Builder does not submit a Time Impact Analysis for a specific change within the time requirements established under this Section 1.6.6, then it is mutually agreed that that particular potential revision or delay has no time impact on any of the scheduled completion dates and the Project's critical path and no time extension will be granted. Subject to the terms and conditions of the Contract Documents, upon mutual agreement by both Parties, fragnets illustrating the influence of Change Order or delay will be incorporated into the Detailed Network Diagram during the first update after agreement is reached

Article 2 - General Work Requirements

2.1 Purpose

The purpose of this Article 2 of Exhibit G is to set forth certain requirements for the performance of the Work. The Design-Builder shall perform the Work in accordance with the Contract Standards, including the requirements set forth in this Exhibit.

2.2 Final Design and Construction Responsibility

In performing the Final Design and Construction, the Design-Builder shall, in accordance with the Contract Standards and without limitation:

- 2.2.1 complete the design of the Project Facilities, including all Design Professional Services necessary to prepare and provide the Final Design and Construction Documents;
- 2.2.2 apply for, obtain and maintain all Governmental Approvals required for the Final Design
- 2.2.3 perform all necessary Project Site preparation and excavation activities;
- 2.2.4 demolish and remove existing improvements at the Project Site, as and to the extent required by the Contract Documents;
- 2.2.5 modify, re-route, repair, or replace utilities, as and to the extent required by the Contract Documents;
- 2.2.6 remove from the Project Site and dispose of any demolition or construction debris resulting from the Final Design and Construction and any unused soil excavated therefrom;
- 2.2.7 procure and provide all necessary materials, labor, machinery, equipment, facilities, tools, consumables, supplies, services and structures;

- 2.2.8 coordinate, supervise, administer and manage the performance of all Final Design and Construction;
- 2.2.9 prepare and provide all plans, reports, manuals, and other documents required by the Contract Documents;
- 2.2.10 construct the Project Facilities;
- 2.2.11 startup, commission, and Acceptance Test the Phase I Project Facilities, including operations and maintenance of the Phase I Project Facilities from startup until the achievement of the Acceptance Standards and Substantial Completion of the Phase I Project Facilities;
- 2.2.12 startup, commission, and Acceptance Test the Phase II Project Facilities, including operations and maintenance of the Phase II Project Facilities from startup until the achievement of the Acceptance Standards and Substantial Completion of the Phase II Project Facilities;
- 2.2.13 train designated City employees in the operations and maintenance of the Project Facilities;
- 2.2.14 coordinate and cooperate with City representatives, including the Project Director and any City Technical Consultant, and keep the Project Director regularly informed as to the progress and quality of the Final Design and Construction;
- 2.2.15 maintain a red lined set of all record documentation and provide final record documentation upon completion; and
- 2.2.16 achieve Final Completion, all so that the Project Facilities are suitable and adequate for the purposes hereof, as established by the Contract Standards. The Final Design and Construction includes all work reasonably inferable from the Contract Documents. Each of the Final Design and Construction obligations are independent obligations, and the fact that the Design-Builder has satisfied one obligation will be no defense to an allegation that it has failed to satisfy another.

2.3 Performance of the Work

2.3.1 Construction to be Performed through Subcontractors and Suppliers

Without limiting anything set forth in Section 2.3.3, it is contemplated that all or substantially all of the Construction will be carried out by Subcontractors and Suppliers. All first-tier Subcontractors and Suppliers are to be awarded fixed-price Subcontracts through a competitive procurement process, unless otherwise expressly authorized by the Project Director in writing. The term "self-perform", as used in the following sentence, means trade work performed by employees of the Design-Builder or any of its Affiliates. The Design-Builder shall not self-perform Construction without the Project Director's prior written approval in accordance with Section 2.3.3.

2.3.2 Competitive Procedures for Construction Work

Design-Builder shall be responsible for dividing the Work into suitable bid packages. Except as may otherwise be approved in writing by the Project Director in accordance with Section 2.3.3, the Design-Builder shall enter into Subcontracts with Subcontractors and Suppliers for the performance of all Construction and, in connection therewith, shall utilize a competitive bidding or competitive sealed proposal process in substantial compliance with the requirements of Subchapter C or Subchapter D, as applicable, of Chapter 2269 of the Texas Government Code. In connection with any such procurement, the Design-Builder shall, in accordance with the Contract Standards:

- 2.3.2.1 develop procurement procedures in consultation with the Project Director and prepare all necessary procurement documents;
- 2.3.2.2 publicly advertise and receive bids or proposals;

- 2.3.2.3 open and review all bids or proposals in a manner that does not disclose the contents of the bids or proposals to Persons not employed by the Design-Builder, the City, or a City Technical Consultant;
- 2.3.2.4 evaluate the bids or proposals in accordance with the selection criteria established in the procurement documents; and
- 2.3.2.5 recommend a bid or proposal for approval by the Project Director in accordance with such evaluation.

The Project Director's approval of a bid or proposal recommended by the Design-Builder in accordance with this Section shall not be unreasonably withheld. Any Subcontract awarded for the performance of Construction shall be subject to the applicable requirements of the General Conditions. Without limiting any of the foregoing, the Design-Builder acknowledges and agrees that the City and any City Technical Consultant shall have the right to: (i) review and comment on all procurement documents; (ii) attend any bid or proposal openings; (iii) attend any meetings with prospective Subcontractors or Suppliers, including scope review meetings; (iv) review all bids, proposals, and other information developed or

otherwise resulting from any competitive procurement, including the Design-Builder's tabulation, scoring or evaluation materials; and (v) otherwise participate in the negotiation and contract award process. Upon contract award, the Design-Builder shall provide the Project Director with a description of the competitive process undertaken in connection with such contract award, together with copies of all material documents used in connection therewith and agreements resulting therefrom.

2.3.3 Alternative Procedures for Construction Work

The Design-Builder may propose to the Project Director alternative procedures for the procurement of Construction, including performance of Construction by labor forces of the Design-Builder, any Affiliate of the Design-Builder or by a Subcontractor or Supplier previously approved by the City. The Project Director's approval of any such alternative procedure shall be in the Project Director's sole discretion. The Design-Builder recognizes that, if the Design-Builder wishes to perform Construction with its own labor forces or the labor forces of an Affiliate or a Subcontractor or Supplier previously approved by the City, the Project Director may, but is not obligated to, require that the Design-Builder, Affiliate, or approved Subcontractor or Supplier submit a bid or proposal for the work on a competitive basis, as contemplated by Section 2.3.2. If the Design-Builder or any Affiliate of the Design-Builder proposes to submit a competitive bid or proposal for Construction, the Design-Builder shall notify the Project Director in writing prior to the issuance of procurement documents for the work, and the Project Director shall have the right to approve such participation in accordance with this Section and to require the submittal of all bids or proposals directly to the City (and not to the Design-Builder) for review, evaluation and selection. Any decision by the Project Director to approve the performance of Construction without obtaining competitive bids or proposals shall be:

- 2.3.3.1 subject to an "open book" process to provide the Project Director with sufficient information to determine whether the proposed pricing of the work is fair, reasonable, and consistent with industry standards for similar services;
- 2.3.3.2 supported by a written determination by the Project Director that the proposed pricing is fair, reasonable and consistent with industry standards for similar services; and
- 2.3.3.3 supported by a legal opinion of the City Attorney that the process and approval complies with Applicable Law.

2.4 Governmental Approvals

- 2.4.1 **Table 2.4** - Table 2.4 (set forth in Attachment 2A) lists certain key Governmental Approvals that will be required for the Project, along with a general summary of the

Design-Builder's expected role with respect to each identified Governmental Approval. Notwithstanding Table 2.4, the Design-Builder is responsible for obtaining all Governmental Approvals necessary for the Project in accordance with the General Conditions (excluding the City-Designated Governmental Approvals), regardless of whether listed in Table 2.4.

2.4.2 **City-Designated Governmental Approvals** - The City-Designated Governmental Approvals are limited to the environmental permits listed under the heading "Environmental Permitting and Approvals" in Table 2.4. Notwithstanding the City's lead role in obtaining the City-Designated Governmental Approvals, the Design-Builder shall be responsible for all obligations specified in the General Conditions with respect to the City-Designated Governmental Approvals, as well as the obligations specified in Table 2.4.

2.4.3 **Assumed Approval Issuance Dates** -The Assumed Approval Issuance Dates will be specified in connection with the appropriate Definitive Contract Amendment based on discussions between the Parties during the Preliminary Services phase of the Project. The Assumed Approval Issuance Dates will be subject to the approval of the Project Director and will provide for a reasonable period following the submittal of a completed Governmental Approval application in accordance with the Contract Standards. Such reasonable period will be established considering the requirements of Applicable Law, the administrative practices of the applicable Governmental Authority, and the City's past experience in connection with similar approvals.

2.5 Existing Facilities

2.5.1 **Shutdowns** - Shutdowns must be approved by the Project Director and scheduled by written request to the Project Director a minimum of 30 days in advance of when they are proposed to occur. From April 1 through September 30, shutdowns shall be limited to a maximum of six hours. From October 1 through March 31, shutdowns shall be limited to a maximum duration of nine hours.

2.5.2 **Maintenance of Access and Other Requirements**

The Design-Builder shall:

2.5.2.1 maintain traffic access to the Existing Plant, including staff access, deliveries, sludge hauling, visitors, and other designated vehicles, at all times;

2.5.2.2 take no actions during Construction that adversely affects the Existing Plant's compliance with the requirements of Applicable Law

2.5.2.3 provide for protection of the Existing Plant, including utilities servicing the Existing Plant, from impacts relating to Construction of the Project Facilities; and

2.5.2.4 adhere to all security requirements relating to the Existing Plant.

2.6 Temporary Construction Facilities

The Design-Builder shall be responsible for setting-up, maintaining, paying for, and operating all temporary construction facilities required for the Construction of the Project Facilities. Key facilities and considerations include:

2.6.1 **Staging, storage, and parking:** Areas for staging, storage, and construction parking on-site are limited. The Design-Builder will be responsible for developing plans for using on-site areas to achieve these functions. The site area to the west of the Project Site adjacent to the access road offers limited space, but use of this area must not impact access into and out of the Existing Plant and must account for construction of the

finished water transmission mains (by others) that will occur within this corridor. The Design-Builder may secure off-site areas for these purposes if necessary.

- 2.6.2 Access: The Design-Builder will be required to construct and maintain construction access into and throughout the construction areas. Access through the Existing Plant will be restricted, and normal traffic requirements for operating the facilities must be maintained. Temporary construction access around the Existing Plant may be necessary.
- 2.6.3 Security: The Design-Builder will be responsible for securing the entire construction area, 7 days a week, 24 hours per day, for the duration of Construction. This includes site fencing and access control into the construction areas, along with securing the Existing Plant from the construction areas.
- 2.6.4 Power: The Design-Builder will be responsible for securing and providing power to construction areas.
- 2.6.5 Water: The Design-Builder shall be responsible for obtaining non-potable and potable water during Construction. Non-potable water can be provided from the existing raw water pipeline within the restraints and requirements of operating the Existing Plant. Similarly, potable water can be obtained from the 30-inch water line located within the raw water pipeline corridor within the limits of service available from H.C.M.U.D. 342, which operates this pipeline. The Design-Builder will be required to construct any required metering, piping, and appurtenances for the water supply.
- 2.6.6 Sanitary Facilities: The Design-Builder will be required to provide the necessary sanitary facilities and associated sewer connections for the field offices, including securing any permits and approvals.
- 2.6.7 Field Offices: Office space shall be provided for the Design-Builder and City personnel for the duration of construction. This may consist of temporary construction trailers or construction of administrative or maintenance space that can be repurposed at the completion of Construction for City staff usage. Space and equipment requirements for City personnel will be developed during Preliminary Services.
- 2.6.8 Controls: The Design-Builder shall provide and maintain temporary controls and procedures for all construction areas, in conformance to regulatory requirements and all other Contract Standards, including noise control, dust control, spill control, and storm run-off control.
- 2.6.9 Identification: The Design-Builder shall erect a Project identification sign in a prominent location at the Project site or along a major thoroughfare within the community, as directed by the City.

Further specific requirements concerning these matters will be established during the Preliminary Services phase of the Project and included in the Specifications.

2.7 Warranty Work

- 2.7.1 **Project Warranties** - The Design-Builder's warranties of the Work (the "Project Warranties") are set forth in the General Conditions. The Design-Builder shall respond to critical or emergency service calls from the City under the Project Warranties within four hours and to non-critical or non-emergency calls within 24 hours. Such response will require that a competent representative or representatives of the Design-Builder familiar with the Project Facilities, including its specific equipment, design, and operational requirements, inspect the Project Facilities and, while on site, either correct the defect or initiate a course of action that will fully correct the defect in accordance with the Contract Standards. If it is not possible in accordance with the Contract Standards to immediately correct the defect in connection with the initial inspection of the Project Facilities, the Design-Builder shall correct the defect as soon as reasonably practicable and in any event within the minimum amount of time required in accordance with the Contract Standards. The Design-Builder shall perform all Warranty Work:

- 2.7.1.1 in accordance with the Contract Standards;
 - 2.7.1.2 in a manner that will minimize interference with the ongoing operations of the Project Facilities; and
 - 2.7.1.3 pursuant to a written plan for all proposed Warranty Work, except in response to critical or emergency situations or where the Project Director expressly waives the requirement of a written plan.
- 2.7.2. **Project Warranties period** - The Project Warranties will be in full force and effect for the period of time beginning on the Date of Substantial Completion for the Phase I Project Facilities and continuing for one year following the Date of Substantial Completion for the Phase II Project Facilities (subject to extension under this Section, the “**Project Warranties Period**”); provided, however, that the Parties may agree in the GMP Amendment to a shorter Project Warranties Period (not less than one (1) year from the Date of Substantial Completion for the Phase I Project Facilities) for specified components of the Phase I Project Facilities that are not critical or integral to the operations of the Project Facilities as a whole, as determined in the sole discretion of the Project Director. The Project Warranties will apply to all Final Design and Construction re-done or corrected (or in the process of being redone or corrected) during the Project Warranties Period so that the Design-Builder's response and rectification obligations for re-done or corrected elements of the Final Design and Construction will extend beyond the Project Warranties Period, if necessary, to provide a further one-year warranty period following acceptance by the City of such re-done or corrected Final Design and Construction, including all systems or subsystems related to the defect for which Warranty Work was performed. Such extended warranty period will be applicable only to the re-done or corrected Final Design and Construction, including all systems or subsystems related to the defect for which Warranty Work was performed, but will not be applicable to unrelated Final Design and Construction. The Design-Builder recognizes that the response and rectification periods set forth in Section 2.7.1 for the performance of Warranty Work are of the essence and that the City shall be entitled to the recovery of damages from the Design-Builder for any loss resulting from the Design-Builder's failure of compliance with such response and rectification periods, subject to the terms and conditions of the Contract Documents.

2.8 Reference Codes, Standards, and Guidelines

Without limiting any other requirement of the Contract Documents and subject to Section 2.3 of the Agreement, the Design-Builder shall perform the Work in accordance with the following reference codes, standards and guidelines:

- 2.8.1 Air Movement and Control Association International (AMCA):
 - 2.8.1.1 210 - Laboratory Methods of Testing Fans for Certified Aerodynamic Performance Rating.
 - 2.8.1.2 211 - Certified Rating Program- Product Rating Manual for Fan Air Performance.
 - 2.8.1.3 300 - Reverberant Room Method for Sound Testing of Fan.
 - 2.8.1.4 301 - Methods for Calculating Fan Sound Ratings from Laboratory Test
- 2.8.2 American Architectural Manufacturers Association (AAMA):
 - 2.8.1.1 210 - Laboratory Methods of Testing Fans for Certified Aerodynamic Performance Rating.
 - 2.8.1.2 211 - Certified Rating Program- Product Rating Manual for Fan Air Performance.
- 2.8.3 American Association of State Highway and Transportation Officials (AASHTO):
 - 2.8.3.1 MP1- Specification for Performance Graded Asphalt Binder.

- 2.8.3.2 M198 - Standard Specification for Joints for Concrete Pipe, Manholes, and Precast Box Sections Using Preformed Flexible Joint Sealants
- 2.8.3.3 M254 - Standard Specification for Corrosion-Resistant Coated Dowel Bars
- 2.8.3.4 M284 - Standard Specification for Epoxy-Coated Reinforcing Bars.
- 2.8.3.5 T277 - Concrete's Ability to Resist Chloride Ion Penetration.
- 2.8.4 American Bearing Manufacturers Association (ABMA):
 - 2.8.4.1 9 - Load Ratings and Fatigue Life for Ball Bearings..
 - 2.8.4.2 10 - Metal Balls.
 - 2.8.4.3 11 - Load Ratings and Fatigue Life for Roller Bearings
- 2.8.5 American Concrete Institute (ACI):
 - 2.8.5.1 117 - Specifications for Tolerances for Concrete Construction and Materials and Commentary.
 - 2.8.5.2 207.1R - Guide to Mass Concrete.
 - 2.8.5.3 222R - Protection of Metals in Concrete Against Corrosion.
 - 2.8.5.4 301 - Specifications for Structural Concrete.
 - 2.8.5.5 318 - Building Code Requirements for Structural Concrete and Commentary
 - 2.8.5.6 350 - Code Requirements for Environmental Engineering Concrete Structures and Commentary,
 - 2.8.5.7 355.2 - Qualification of Post-Installed Mechanical Anchors in Concrete & Commentary
 - 2.8.5.8 440.2R - Guide for the Design and Construction of Externally Bonded FRP Systems for Strengthening Concrete Structures.
 - 2.8.5.9 03.4 - Standard Specification for Repairing Concrete with Epoxy Mortar.
 - 2.8.5.10 506R - Guide to Shotcrete.
 - 2.8.5.11 506.2 - Specification for Material, Proportioning, and Application of Shotcrete
 - 2.8.5.12 530.1 - Specification for Masonry Structures.
 - 2.8.5.13 Manual of Concrete Practice.
 - 2.8.5.14 SP-66 - ACI Detailing Manual.
- 2.8.6 Americans with Disabilities Act (ADA)
- 2.8.7 American Gear Manufacturer's Association (AGMA):
 - 2.8.7.1 908 - Geometry Factors for Determining the Pitting Resistance and Bending Strength of Spur, Helical, and Herringbone Gear Teeth.
 - 2.8.7.2 915-1 - Inspection Practices - Part 1: Cylindrical Gears – Tangential Measurements.
 - 2.8.7.3 915-2 - Inspection Practices - Part 2: Cylindrical Gears - Radial Measurements.
 - 2.8.7.4 2000 - Gear Classification and Inspection Handbook - Tolerances and Measuring Methods for Unassembled Spur and Helical Gears
 - 2.8.7.5 6001-E08 - Design and Selection of Components for Enclosed Gear Drives.
 - 2.8.7.6 6013 - Standard for Industrial Enclosed Gear Drives.
 - 2.8.7.7 9005 - Industrial Gear Lubrication.

- 2.8.8 American Institute of Steel Construction (AISC) Steel Construction Manual
 - 2.8.8.1 303 - Code of Standard Practice for Steel Buildings and Bridges.
 - 2.8.8.2 326 - Design for Structural Construction.
 - 2.8.8.3 360- Specification for Structural Steel Building
 - 2.8.8.4 Manual of Steel Construction: Allowable Stress Design.
- 2.8.9 American Iron and Steel Institute (AISI):
 - 2.8.9.1 Cold-Formed Steel Design Manual.
- 2.8.9 American Iron and Steel Institute (AISI):
 - 2.8.9.1 Cold-Formed Steel Design Manual.
- 2.8.10 American National Standards Institute (ANSI):
 - 2.8.10.1 A135.4 - Basic Hardboard.
 - 2.8.10.2 A 208.1 - Mat Formed Particleboard.
 - 2.8.10.3 B212.15 - Carbide Tipped Masonry Drills and Blanks for Carbide Tipped Masonry Drills.
 - 2.8.10.4 C80.1 - Electrical Rigid Steel Conduit.
 - 2.8.10.5 C80.3 - Steel Electrical Metallic Tubing.
 - 2.8.10.6 C80.5 - Electrical Rigid Aluminum Conduit.
 - 2.8.10.7 Z21.47 - Gas Fired Central Furnaces (except Direct Vent Central Furnaces) with Addenda.
- 2.8.11 American Petroleum Institute (API):
 - 2.8.11.1 541 - Form-Wound Squirrel Cage Induction Motors - 500 Horsepower and Larger.
 - 2.8.11.2 547 - General Purpose Form-Wound Squirrel Cage Induction Motors - 250 Horsepower and Larger.
 - 2.8.11.3 670 - Vibration, Axial Position, and Bearing Temperature Monitoring Systems
 - 2.8.11.4 682 - Shaft Sealing Systems for Centrifugal and Rotary Pumps
- 2.8.12 American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE):
 - 2.8.12.1 15 - Safety Standard for Refrigeration System
 - 2.8.12.2 52.2 - Method of Testing General Ventilation Air-Cleaning Devices for Removal Efficiency by Particle Size.
 - 2.8.12.3 62.1 - Ventilation for Acceptable Indoor Air Quality.
- 2.8.19 Brick Industry of America (BIA):
 - 2.8.19.1 Technical Notes on Brick Construction.
- 2.8.20 City of Houston Building Department: The most recently adopted version of the building codes, and associated amendments, on the date when the amendment to perform Component 2 of the Preliminary Services is executed will apply. Below are the current versions of the code that have been adopted by the City:
 - 2.8.20.1 2012 International Building Code
 - 2.8.20.2 2014 National Electric Code

- 2.8.20.3 2012 International Fire Code
- 2.8.21 City of Houston Department of Public Works and Engineering: Applicable portions of the Infrastructure Design Manual, latest edition.
- 2.8.22 Concrete Reinforcing Steel Institute (CRSI):
 - 2.8.22.1 Manual of Standard Practice.
- 2.8.23 Federal Highway Administration (FHWA):
 - 2.8.23.1 RD-86-193 - Highway Concrete Pavement Technology Development and Testing Volume V: Field Evaluation of SHRP C9206 Test Sites.
- 2.8.24 Hydraulic Institute (HI):
 - 2.8.24.1 1.1-1.2 - Centrifugal Nomenclature.
 - 2.8.24.2 1. 3 – Rotodynamic (Centrifugal) Pumps for Design and Application.
 - 2.8.24.3 1.6 - Centrifugal Tests.
 - 2.8.24.4 2.1-2.2 - Rotodynamic (Vertical) Pumps for Nomenclature and Definitions.
 - 2.8.24.5 2.3 - Rotodynamic (Vertical) Pumps for Design and Applications.
 - 2.8.24.6 2.4 - Rotodynamic (Vertical) Pumps for Installation Operations and Maintenance
 - 2.8.24.7 3.1-3.5 - Rotary Pumps for Nomenclature, Definitions, Application, and Operation.
 - 2.8.24.8 3.6 - Rotary Pump Tests.
 - 2.8.24.9 9.1-9.5 - Pumps - General Guidelines for Types, Application, Definitions, Sound Measurement, and Decontamination.
 - 2.8.24.10 9.8 - American National Standard for Pump Intake Design.
 - 2.8.24.11 14.6 - Rotodynamic Pumps for Hydraulic Performance Acceptance Tests
- 2.8.25 Institute of Electrical and Electronic Engineers (IEEE):
- 2.8.26 Electrical Standards
- 2.8.27 Insulated Cable Engineers Association (ICEA):
 - 2.8.27.1 S-73-532 - Standard for Control, Thermocouple Extension, and Instrumentation Cables.
 - 2.8.27.2 S-93-639 - ICEA/NEMA Standard for Shielded Power Cables Rated 5-46 kV for the Distribution of Electrical Energy.
 - 2.8.27.3 S-95-658-1999 - Standard for Non-Shielded Power Cables Rated 2000 Volts or Less for the Distribution of Electrical Energy.
 - 2.8.27.4 S-96-649 - Standard for Concentric Neutral Cables Rated 5 Through 46 kV.
S-97-682 - Standard for Utility Shielded Power Cables Rated 5 Through 46 kV.
- 2.8.28 International Building Code (IBC)
- 2.8.29 International Code Council (ICC-ES):
 - 2.8.29.1 AC125 - Concrete and Reinforced and Unreinforced Masonry Strengthening Using Fiber-Reinforced Polymer (FRP) Composite Systems.
 - 2.8.29.2 156 - Acceptance Criteria for Seismic Certification by Shake Table Testing of Non-Structural Components.

- 2.8.29.3 AC178 - Inspection and Verification of Concrete and Reinforced and Unreinforced Masonry Strengthening Using FRP Composite Systems.
- 2.8.29.4 AC308 - Acceptance Criteria for Post-Installed Adhesive Anchors in Concrete
- 2.8.29.5 Elements.
- 2.8.30 International Concrete Repair Institute (ICRI):
 - 2.8.30.1 310 - Concrete Surface Committee
- 2.8.31 International Organization for Standardization (ISO):
 - 2.8.31.1 53 - Cylindrical Gears for General and Heavy Engineering - Standard Basic Rack Tooth Profile.
- 2.8.32 International Society of Automations (ISA):
 - 2.8.32.1 5.1 - Instrumentation Symbols and Identification.
 - 2.8.32.2 5.4 - Instrument Loop Diagrams
 - 2.8.32.3 20 - Specification Forms for Process Measurement and Control Instruments, Primary Elements, and Control Valves.
- 2.8.33 Manufacturers Standardization Society (MSS):
 - 2.8.33.1 SP-58 - Pipe Hangers and Supports - Materials, Design, and Manufacture.
- 2.8.34 NACE International (NACE):
 - 2.8.34.1 SP0178 - Design, Fabrication, and Surface Finish Practices for Tanks and Vessels to Be Lined for Immersion Service.
 - 2.8.34.2 SP0188 - Discontinuity (Holiday) Testing of Protective Coatings.
- 2.8.35 National Association of Architectural Metal Manufacturers (NAAMM):
 - 2.8.35.1 HMMA 861 - Guide Specifications for Commercial Hollow Metal Doors and Frames.
- 2.8.36 National Association of Pipe Fabricators (NAPF):
 - 2.8.36.1 500-03 - Surface Preparation Standard for Ductile Iron Pipe and Fittings Receiving Special External Coatings and/or Special Internal Linings.
- 2.8.37 National Electric Code (NEC)
- 2.8.38 National Electrical Manufacturers Association (NEMA):
 - 2.8.38.1 ICS 18-2001 - Motor Control Centers.
 - 2.8.38.2 LD 3 - High-Pressure Decorative Laminates.
 - 2.8.38.3 MG-1 - Motors and Generators.
 - 2.8.38.4 MG-2 - Safety Standard for Construction and Guide for Selection, Installation, and Use of Electric Motors and Generators.
 - 2.8.38.5 RN-1 - Polyvinyl Chloride (PVC) Externally Coated Galvanized Rigid Steel Conduit and Intermediate Steel Conduit.
 - 2.8.38.6 TC2 - Electrical Polyvinyl Chloride (PVC) Conduit.
 - 2.8.38.7 TC3 - Polyvinyl Chloride (PVC) Fittings for Use with Rigid PVC Conduit and Tubing.
 - 2.8.38.8 TC7 - Smooth-Wall Coilable Electrical Polyethylene Conduit.
 - 2.8.38.9 250 - Enclosures for Electrical Equipment (1000 V Maximum).

- 2.8.39 National Fire Protection Association (NFPA):
 - 2.8.39.1 20 - Standard for the Installation of Stationary Pumps for Fire Protection.
 - 2.8.39.2 37 - Standard for the Installation and Use of Stationary Combustion Engines and Gas Turbines.
 - 2.8.39.3 54 - National Fuel Gas Code.
 - 2.8.39.4 70 - National Electric Code (NEC).
 - 2.8.39.5 72 - National Fire Alarm and Signaling Code.
 - 2.8.39.6 80 - Standard for Fire Doors and Other Opening Protectives.
 - 2.8.39.7 90A - Standard for the Installation of Air-Conditioning and Ventilating Systems.
 - 2.8.39.8 820 - Standard for Fire Protection in Wastewater Treatment and Collection Facilities.
- 2.8.40 NSF International (NSF):
 - 2.8.40.1 60 - Drinking Water Treatment Chemicals
 - 2.8.40.2 61 – Drinking Water System Components - Health Effects.
 - 2.8.40.3 372 - Drinking Water System Components - Lead Content.
- 2.8.41 Occupational Safety and Health Administration (OSHA)
- 2.8.42 Precast Concrete Institute (PCI):
 - 2.8.42.1 Manuals.
- 2.8.43 Research Council of Structural Connections (RCSC):
- 2.8.44 Specification for Structural Joints Using High-Strength Bolts.
- 2.8.45 Sheet Metal and Air Conditioning Contractors' National Association (SMACNA):
 - 2.8.45.1 HVAC Duct Construction Standards - Metal and Flexible.
 - 2.8.45.2 Seismic Restraint Manual Guidelines for Mechanical Systems.
- 2.8.46 Society for Protective Coatings (SSPC):
 - 2.8.46.1 SP-1 - Solvent Cleaning
 - 2.8.46.2 SP-2 - Hand Tool Cleaning
 - 2.8.46.3 SP-3 - Power Tool Cleaning
 - 2.8.46.4 SP 5 - White Metal Blast Cleaning.
 - 2.8.46.5 SP 6 - Commercial Blast Cleaning.
 - 2.8.46.6 SP 7 - Brush-Off Blast Cleaning.
 - 2.8.46.7 SP-10 - Near-White Blast Cleaning.
 - 2.8.48.8 SP 13 - Surface Preparation of Concrete.
- 2.8.47 State of Texas:
 - 2.8.47.1 Texas Engineering Practice Act and Rules Concerning the Practice of Engineering and Professional Engineering Licensure.
- 2.8.48 Steel Door Institute (SDI):
 - 2.8.48.1. 11 - A Steel Doors and Frame Details.

- 2.8.48.2. 117 - Manufacturing Tolerances Standard Steel Doors and Frames.
- 2.8.49 Telecommunications Industry Association/Electronics Industry Association (TIA/EIA):
 - 2.8.49.1. 568-C.2 - Balanced Twisted-Pair Telecommunication Cabling and Components Standard.
- 2.8.50 Texas Commission on Environmental Quality (TCEQ):
 - 2.8.50.1. Title 30, Texas Administrative Code (30 TAC), Chapter 290, Subchapter D:
Rules and Regulations for Public Water Systems.
- 2.8.51 Underwriters' Laboratories, Inc. (UL):
 - 2.8.51.1 1 - Standard for Flexible Metal Conduit.
 - 2.8.51.2 6 - Standard for Electrical Rigid Metal Conduit – Steel.
 - 2.8.51.3 9 - Standard for Fire Tests of Window Assemblies.
 - 2.8.51.4 10B - Fire Tests of Door Assemblies.
 - 2.8.51.5 10C - Positive Pressure Fire Tests of Door Assemblies.
 - 2.8.51.6 44 - Thermoset-Insulated Wires and Cables.
 - 2.8.51.7 181A - Closure Systems for Use With Rigid Air Ducts.
 - 2.8.51.8 674 - Electric Motors and Generators for Use in Division 1 Hazardous (Classified) Locations.
 - 2.8.51.9 1072 - Standard for Safety for Medium-Voltage Power Cables.
 - 2.8.51.10 1424 - Standard for Cables for Power-Limited Fire-Alarm Circuits.
- 2.8.52 U. S. Army Corps of Engineers (USACE):
 - 2.8.52.1 CRD-C-572 - Specification for Polyvinyl Chloride Waterstop
- 2.8.53 United States Code of Federal Regulations (CFR):
 - 2.8.53.1 29 – Labor.
 - 2.8.53.2 40 - Protection of the Environment
 - 2.8.53.3 49 – Transportation
- 2.8.54 U.S. General Services Administration (GSA):
 - 2.8.54.1 PBS 07111.
- 2.8.55 U.S. Green Building Council:
 - 2.8.55.1 LEED NC v2.2 - Reference Guide
- 2.8.56 Window and Door Manufacturers Association (WDMA)
 - 2.8.56.1 I.S. 1A - Architectural Wood Flush Doors.
 - 2.8.56.2 I.S. 4 - Industry Standard for Preservative Treatment of Millwork.

Attachment 2A – Project Permitting Requirements

Table 2.4

Table 2.4 Project Permitting Requirements			
Permit/Approval	Jurisdictional Agency	Reference	Design-Builder's Role
Environmental Permitting & Approval			
404 Permit and associated approvals	U.S. Corps of Engineers	CWA Section 404	1. Provide design documentation to City for use in permit amendment as required for any modifications to Indicative Design.
401 Permit	TCEQ	CWA Section 401	2. Support public comment & agency meeting process.
Cultural Resources Approval	Texas Historical Commission	13 TAC 26	3. Implement permit requirements during construction of Project Facilities. 4. Design and construct Project Facilities in accordance with requirements of permit.
State of Texas Permitting & Approval			
Construction Stormwater Management	TCEQ	Chapter 13 - Infrastructure Design Manual	Design systems and obtain approvals for stormwater pollution prevention procedures and controls for construction activities and implement requirements.
Emergency Preparedness Plan	TCEQ	30 TAC 290 D, §290.39(c)(4)(A)	Provide documentation to City for use in preparing emergency preparedness plan.
Approval of construction documents	TCEQ	30 TAC 290 D, §290.39(d)	1. Submit final plans and specifications for review & obtain TCEQ approval. 2. Modify documents based on accepted comments. 3. Submit changes to plans that modify 290D requirements in approved plans.
Basis of Design Approval	TCEQ	30 TAC 290 D, §290.39(e)	Submit basis of design and associated planning documents to TCEQ for review and approval. Obtain TCEQ approval.
Business Plan	TCEQ	30 TAC 290 D, §290.39(f)	Provide documentation to City for use in preparing business plan.
Intake Location Approval	TCEQ	TCEQ 30 TAC 290D, §290.41(e)(2)(D)	Provide preliminary plans to TCEQ staff for review, conduct tour with staff, and respond to comments. Obtain approval for location.
CT Study Approval	TCEQ	CT Template Instruction Manual (TCEQ website)	Provide documentation and information to City to allow for their use in preparing and submitting a CT Study. Approval required prior to sending treated water to potable systems.
Completion of Work Notification	TCEQ	30 TAC 290D, §290.41(h)	Notify TCEQ of completion of work (for both Phase 1 capacity milestone and Phase 2 capacity milestone) in accordance with approved plans and specifications prior to sending treated water to the potable systems.
Architectural Barriers Approval	TDLR	16 TAC 68	Design Facilities per requirements, submit documents for review, and obtain approval.

Table 2.4 Project Permitting Requirements			
Permit/Approval	Jurisdictional Agency	Reference	Design-Builder's Role
Local Permitting & Approval			
Approval for work within Public ROW	Harris Co.	http://hcpid.org/permits/civil_dev_forms.html http://hcpid.org/permits/docs/ROW_notification_for_row_const_app.pdf See also Note 2	Obtain Harris County approval for work within West Lake Houston Parkway right-of-way (ROW), including submission of required Notification of Construction in Right-of-Way form and all associated supporting documentation..
Storm Water Quality Management Plan Permit	Houston - PWE	Ord. No. 01-800 (Code of Ordinance Chapter 47, Article 12) Chapter 9 – Infrastructure Design Manual	Develop Storm Water Quality Management Plan for Project Facilities to achieve necessary requirements, submit required applications, forms, and other information for review in timely manner, and obtain necessary approvals of design to facilitate issuance of Storm Water Quality Management Plan Permit. Design Project Facilities to achieve necessary stormwater requirements.

Table 2.4 Project Permitting Requirements			
Permit/Approval	Jurisdictional Agency	Reference	Design-Builder's Role
Commercial Building Permit	Houston – PWE & other departments	http://www.houstonpermittingcenter.org/building-code-enforcement.html (Adopted codes at date of submission) Process includes review by the City of Houston's Public Works and Engineering Department (water, sanitary sewer, storm drainage, flood plain, traffic, and transportation, proposed site plan); Fire Marshall (fire alarms, electrical locks, stand pipes, hazmat, and high-piled storage); Health and Human Services Department (food services); and Code Enforcement Department (electrical, plumbing, structural, HVAC, storm drainage, and fire protection systems).	Design Project Facilities to achieve necessary requirements, submit required applications, forms, and other information for review in timely manner, and obtain necessary approvals of design to facilitate issuance of Commercial Building Permit. Coordinate with Commercial Building Inspectors during construction phase to facilitate all necessary approvals.
Site Plan Development Permit	Houston - PWE	Houston Code of Ordinances, Chapter 42	Design Project Facilities to achieve necessary site development requirements (parking, landscaping, other requirements), submit required information for review, obtain necessary approvals of design.
Other Approvals	Harris County Engineering Department, Permits	http://hcpid.org/permits/civil_dev_forms.html http://hcpid.org/permits/docs/commercial_development_permitting_guide.pdf	Coordinate Project Commercial Building Permit review process to ensure compliance with,

			and ultimate approval of, overlapping jurisdictional items, including, but not limited to, fire protection/access, flood control, flood plain management, and traffic control, by Harris County.
Railroad Crossing Approval	Union Pacific Railroad	None	Obtain approval from railroad for utility crossings.
<u>Notes:</u> (1) Unless otherwise noted, the Design-Builder is responsible for obtaining all necessary permits and approvals. Further, the Design-Builder is responsible for paying all fees associated with permits and approvals they are charged with obtaining. (2) Rules of Harris County and Harris County Flood Control District for the Construction of Facilities within Harris County and Harris County Flood Control District Rights of Way			

Article 3 - Quality Control Requirements

3.1 Purpose

The purpose of this Article 3 of Exhibit G is to describe the minimum requirements for the Quality Management Plan, including quality assurance ("QA") and quality control ("QC") procedures that shall be implemented during Final Design and Construction. Quality assurance and quality control ("QA/QC") shall include inspection, sampling and testing, and other requirements.

3.2 City's Quality Objectives

The Quality Management Plan component of the Project Management Plan shall be consistent with and support the following quality objectives for the Work:

- 3.2.1 ensure that permitting, design, construction, and testing are consistent with the Contract Standards;
- 3.2.2 ensure that Governmental Approval requirements are effectively incorporated into the Work;
- 3.2.3 develop and implement procedures to ensure that problems are discovered early, resolved in a timely manner, and do not recur;
- 3.2.4 ensure that adequate QA/QC procedures and resources are provided by the Design-Builder to effectively assess and ensure high quality in all work products and services and compliance with the Acceptance Standards, warranty requirements, safety, security, and environmental compliance requirements;
- 3.2.5 provide timely reporting and documentation of QA/QC inspections, technical reviews, testing, analysis, and determinations of compliance with the Contract Standards; and
- 3.2.6 provide follow up inspections, analysis and testing if conditions are found to be non-compliant with the Contract Standards and verify through special reports and direct communications with the City that all corrective actions have been effectively implemented and that the resultant product or service is of acceptable quality

3.3 Quality Management Plan Development and Implementation

3.3.1 General Requirements

The development and implementation of the Quality Management Plan shall be the responsibility of the Design-Builder. Without limiting any other requirement of the Contract Documents, the Quality Management Plan shall integrate the permitting, design, construction, commissioning and testing of the Project Facilities during Final Design and Construction and shall include detailed QA and QC programs and procedures.

3.3.2 Quality Management Plan Requirements.

Without limiting any other requirement of the Contract Documents, the Quality Management Plan shall include:

- 3.3.2.1 a description of how the Design-Builder will provide the following:
 - a. adequate resources for effective plan implementation throughout all phases of the Work, including information on QA/QC staff to be assigned to the Project and their qualifications for performing required QA/QC functions;
 - b. programs, procedures, methods, tests, analyses and communications procedures, reports, photographs and comments on Drawings, Specifications and other documents used by the Design-Builder to assess Work quality and compliance with the Contract Standards; and
 - c. how the QA/QC program shall function independently of Design-Builder's production staff and be empowered to enforce plan objectives, define quality requirements, independently verify quality of Work products and services, identify potential causes of unacceptable quality of work and provide safeguards to prevent unacceptable work quality, and require prompt corrective action for identified deficiencies;
- 3.3.2.2 coordination with the Communications Plan and all other components of the Project Management Plan;
- 3.3.2.3 clearly defined instructions for performing inspections, including the work attributes to be inspected, acceptability criteria, frequency of inspections, and the requirements for documenting the inspection results;
- 3.3.2.4 documentation requirements, including contractor production reports, contractor quality control reports, field test reports, testing plan and log, inspection reports, rework items list and quality control meeting minutes;
- 3.3.2.5 methods to be implemented to identify and track all unsatisfactory, deviating, and nonconforming work until the required repair, rework, or replacement is performed, and the work has been re-inspected and accepted; and
- 3.3.2.6 means and methods for identifying and correcting all Construction deficiencies such that construction quality meets the Contract Standards;

3.4 Construction Quality Control Requirements

3.4.1 City Rights and Responsibilities

The City's rights to review, inspect, test and monitor the Work are set forth in the General Conditions. The Specifications will address coordination between City tests and inspections of the Work and the Design-Builder's Construction Quality Control Program ("CQCP").

3.4.2 Construction Quality Control Program

All Work performed by any DB-Related Entity shall be inspected by the Design-Builder. All nonconforming Work and any safety hazards in the Work area shall be noted and promptly corrected. The CQCP, as reflected in the Quality Management Plan, shall require inspection during Construction by inspectors who are not responsible, in whole or in part, for the scheduling or construction of the Work being inspected. Inspection records must be kept current, have sufficient detail to enable applicable DB-Related Entities performing Design Professional Services to identify inspections which have been performed, and the results of these inspections. Inspections must be made throughout the period of Construction, including the initial construction, in-process inspections, final inspections, and testing during construction. The Design-Builder shall be informed of all unsatisfactory or nonconforming conditions.

3.4.3 Materials and Equipment

The CQCP shall ensure the quality of all material and equipment. Procedures shall be used to verify that the procurement documents meet all Contract Standards, and that quality has been controlled during the manufacture and testing of all equipment which is being fabricated for the Project Facilities. The CQCP shall require written documentation of inspection of all material and equipment to ensure that it meets all Contract Standards. Documentation such as material test reports, certifications, and equipment tests results must be delivered to the City to demonstrate compliance with all Contract Standards. The CQCP shall include monitoring procedures to ensure that material and equipment is delivered to the Project Site undamaged, in the proper quantities and in accordance with the specification requirements, and that all materials and equipment are stored and maintained on the Project Site according to the Contract Standards. Procedures and controls shall be provided to ensure that inspections are being performed using the latest Drawings, Specifications and approved shop drawings. Procedures shall ensure that an adequate number of inspection personnel are available at all times, and that all inspectors are qualified, trained, and proficient in performing inspections for the Work to which they are assigned.

3.4.4 Construction Management and Testing

The Design-Builder shall provide full-time construction management and full and comprehensive construction administration for the Work. Construction inspectors, who shall be provided with the Issued for Construction Drawings and Specifications and all other relevant documents, shall perform initial verification of procurement and construction activities, so that any conflicts will be identified at an early stage. The CQCP shall clearly identify the circumstances under which DB-Related Entities responsible for Design Professional Services will be involved in construction quality oversight.

Article 4 - Commissioning and Acceptance

4.1 Purpose

This Article 4 of Exhibit G describes general requirements for Commissioning, including preconditions for Commissioning, Acceptance Testing, and achievement of the Acceptance Standards. Additional requirements will be developed during the Preliminary Services phase of the Project and included in the Specifications.

4.2 Commissioning and Acceptance Testing Generally

The following general requirements will apply to all Commissioning and Acceptance Testing:

- 4.2.1 Notice shall be given to the City at least 21 calendar days prior to the start of any Commissioning or Acceptance Testing.
- 4.2.2 Design-Builder shall provide written notification to TCEQ of completion of Work in accordance with approved plans and Specifications in accordance with all applicable regulatory requirements, including 30 TAC 290D, §290.41(h). Notification shall be issued following successful completion of Commissioning, and at least ten days prior to initiation of Acceptance Testing. The City shall be copied on all correspondence with TCEQ.
- 4.2.3 City personnel, including City Technical Consultants, shall have the right to be on-site and to witness all Commissioning and Acceptance Testing.
- 4.2.4 Pre-commissioning, Commissioning, and Acceptance Testing shall be conducted in accordance with the requirements of the approved Specifications.
- 4.2.5 It shall be the Design-Builder's responsibility to provide all operations and maintenance personnel to successfully operate the NEWPP Expansion facilities while performing Commissioning and Acceptance Testing. The Design-Builder shall be fully responsible for

the planning and coordination of Commissioning and Acceptance Testing. The Design-Builder shall assemble a testing team with organization, responsibility, authority, and decision-making protocols and considerable experience in the installation, testing, and startup of similar facilities, including contractor personnel, Subcontractors, startup personnel, equipment manufacturer representatives, and others as necessary. Resumes of the testing team members, and their availability, are to be provided as part of the Commissioning and Acceptance Plans. The testing team shall be subject to the reasonable approval of the Project Director.

- 4.2.6 The Design-Builder shall be fully responsible for supervising, operating, and maintaining the Project during Acceptance Testing. Operations personnel engaged in Acceptance Testing shall possess the required level of certification from TCEQ
- 4.2.7 The Design-Builder may perform Commissioning and Acceptance Testing twenty-four hours per day, seven days per week, or as otherwise required by the Commissioning Plan, Acceptance Testing Plan, and final Project Schedule.
- 4.2.8 The Design-Builder shall maintain a file containing approved equipment manufacturers' installation, operation, and maintenance instruction manuals that will be available in the field during testing and related activities.
- 4.2.9 The Operation and Maintenance Manual, as prepared by the Design-Builder, shall be completed as a pre-final document, with comments received from the City on the draft manual addressed, prior to initiation of Acceptance Testing.
- 4.2.10 The Design-Builder is responsible for planning, scheduling, furnishing, and the cost of all reports, labor, manufacturers' expenses, safety provisions, power, chemicals, lubricants, fuels, proper handling and disposal of residuals, water quality testing and laboratory fees, testing instruments and apparatus, and other consumables and incidentals used during all training, instruction, calibration, testing (and, where necessary, retesting or replacement), adjustments, Commissioning, Acceptance Testing, and any follow-up testing required as a condition of approved completion of Acceptance Testing
- 4.2.11 All water treatment chemicals used during Commissioning and Acceptance Testing shall be National Sanitation Foundation (NSF) approved for use in potable water.
- 4.2.12 The Design-Builder shall ensure that the Project Facilities are not tested or operated in a manner that:
 - 4.2.12.1 Subjects components, devices, equipment, subsystems, or systems to conditions that are more severe than the maximum allowable operating conditions for which the items were designed;
 - 4.2.12.2 Results in components, devices, or equipment operating at ranges outside those recommended by the manufacturer; or
 - 4.2.12.3 Violates regulations or causes City treatment requirements to not be achieved.

4.3 Preconditions to Commissioning and Acceptance Testing

4.3.1 General

- 4.3.1.1 Preconditions To Commissioning And Acceptance Testing
- 4.3.1.2 Software acceptance testing including factory acceptance testing shall be completed prior to Commissioning.
- 4.3.1.3 When source quality control testing is specified:
 - a Demonstrate components, devices, equipment, and software meets specified performance requirements.
 - b Provide certified copies of source quality control test results.

- c Do not ship components, devices, equipment, or software until receipt of certified copies of source quality control test results demonstrating compliance with specified performance requirements.

4.3.1.4 Equipment, subsystems, and systems within a facility or portion of the Project may be commissioned as they are completed and made ready for testing. Equipment, subsystems, and systems shall not be considered ready for Commissioning until the following conditions are met:

- a Mechanical, electrical, instrumentation, SCADA, communication, plumbing, HVAC, structural, and other work shall be completed as necessary to provide working equipment, subsystems, and systems with safety features in working order.
- b All design submittals for such equipment, subsystem, or system shall have been completed by the Design-Builder and reviewed and accepted by the City in accordance with the Submittal Protocol.
- c Tagging, signage, pipe labels, panel identification, and wiring identification shall be completed to the extent necessary to identify items being tested.
- d Utilities are working and properly connected.
- e Equipment, piping, electrical wiring, and instrumentation are installed.
- f Protective coatings are applied and holiday testing completed.
- g Electrical acceptance tests are completed including checking for correct connections, operations, and performance of power distribution equipment.
- h Arc-flash hazard study is complete and any required modifications implemented.
- i Conductors and cables testing is complete including continuity and insulation resistance tests performed on conductors.
- J Instrumentation testing and initial calibration of devices is complete.
- k PLC and SCADA programming is complete and tested.
- l Safety devices and equipment are installed, fully functional, adjusted, and tested
- m Individual equipment manufacturers' operations and maintenance manuals, including testing and startup procedures, shall have been completed by the Design-Builder and reviewed by the City in accordance with the Submittal Protocol.
- n Pipe leakage and hydraulic tests are completed and any leaks repaired.
- o Water containing structures shall have passed leakage test requirements in accordance with the Specifications.
- p Manufacturer representatives shall perform pre-operational checkouts to verify that equipment is properly installed, lubricated, cleaned, anchored, aligned, grounded, rotates properly, and is ready for Equipment and Subsystem Testing in accordance with Section 4.3.2 of this Exhibit. A pre-operational checkout form shall be completed by the Design-Builder and submitted to the City upon successful completion of checkout.

4.3.2 Commissioning and Acceptance Testing Plans

The Design-Builder shall prepare and submit to the City a Commissioning Plan and an Acceptance Testing Plan in accordance with the following requirements:

- 4.3.2.1 Commissioning Plan: The Design-Builder shall submit a draft Commissioning Plan for all equipment, subsystems, and systems to the City a minimum of 90 calendar days prior to initiation of Equipment and Subsystem Testing and System Testing in accordance with the Submittal Protocol. The Commissioning Plan shall be developed to allow for a coordinated set of activities that provide for timely, efficient, and successful testing of the Project. The Commissioning Plan shall include a schedule of the manufacturers' equipment inspection and certification, training of City employees, equipment testing, instrumentation testing, SCADA system testing, electrical testing, and systems testing, including coordination with utilities. The Commissioning Plan shall include detailed test checklists and forms for each item of equipment and each subsystem and will address any coordination necessary with City employees as well as utility requirements. The Design-Builder shall revise and update the Commissioning Plan as necessary in accordance with any comments provided by the City or its representatives. The final Commissioning Plan shall be submitted a minimum of 30 days prior to commencement of Commissioning.
- 4.3.2.2 Acceptance Testing Plan: The Design-Builder shall submit a draft Acceptance Testing Plan that sets forth the requirements for start-up and Acceptance Testing of the Project Facilities to the City for approval a minimum of 180 days prior to initiation of Acceptance Testing in accordance with the Submittal Protocol. The Design-Builder shall revise and update the Acceptance Testing Plan as necessary in accordance with any comments provided by the City or its representatives. The final Acceptance Testing Plan shall be submitted a minimum of 60 calendar days prior to commencement of testing. The Acceptance Testing Plan shall include:
- a Proposed Acceptance Testing schedule, including a Raw Water supply schedule, Treated Water production schedule, and points of coordination with utilities
 - b Water management plan demonstrating how water will be produced, conveyed, treated, recycled, and/or disposed until treatment achieves the Acceptance Standards and can be distributed to the potable water system.
 - c Identification of Acceptance Testing team, including roles, responsibilities, authority, and decision-making protocols. Resumes of each Acceptance Testing team member shall be provided.
 - d All Project Facilities, equipment, subsystems, and systems to be operated
 - e Procedures for demonstrating compliance with the Acceptance Standards
 - f Procedures and operating conditions for Acceptance Testing of the Project Facilities, including all equipment, subsystems, and systems
 - g Use of permanent and temporary instrumentation for testing
 - h SCADA system monitoring and control functions with a list of real-time data fields that will be captured during Acceptance Testing
 - i List of all Raw Water, intermediate, and Treated Water parameters to be monitored and a schedule of monitoring
(continuous, grab and laboratory), analytical methods, sample collection procedures, sampling frequencies at which parameters will be monitored and quality assurance and quality control procedures
 - j Identification of equipment calibrations to be performed, descriptions of all calibration techniques to be used and frequency of calibrations
 - k Protocols for comparing collected data with the Acceptance Standards

- l Response procedures for unsuccessful test results including definition of threshold results that constitute overall Acceptance Testing failure
 - m Internal and external communication protocols
 - n Procedures for re-treatment or disposal of non-complying Treated Water or Raw Water
 - o Protocol for delivering samples to the City Engineer for additional testing if the City elects to have such a program during Acceptance Testing
 - p Procedures for maintaining equipment during Acceptance Testing
- 4.3.2.3 Provide detailed sub-network of Commissioning and Acceptance Testing activities, durations, and sequencing requirements in Progress Schedule with the following activities identified:
 - a Manufacturer representatives' services
 - b Certificate of Proper Installation (COPI) dates
 - c Operations training
 - d Submissions of Operations and Maintenance Manuals
 - e Pre-commissioning activities
 - f Equipment and Subsystem Testing
 - g System Testing
 - h Acceptance Testing
 - i Transition Services
- 4.3.2.4 The Design-Builder shall update and revise the approved Commissioning Plan and Acceptance Testing Plan, as necessary, to accommodate changes in the sequence of activities. All changes to the approved Commissioning Plan and Acceptance Testing Plan shall be subject to review and approval by the City.

4.4 Commissioning

4.4.1 General

The purpose of commissioning is to demonstrate that the equipment, components, subsystems, systems, and other elements of the Project Facilities function properly on a continuous basis prior to initiation of Acceptance Testing ("Commissioning"). In addition, Commissioning shall be performed to demonstrate that the individual equipment, components, subsystems, and systems have been properly installed and are operating in accordance with the requirements of the Agreement, including the manufacturer's written requirements. Demonstrated process treatment is not an objective of Commissioning, and production of Treated Water will not be achieved during Commissioning. No Treated Water will be delivered to the Water Systems prior to the commencement of Acceptance Testing, unless approved in writing by TCEQ and the Project Director.

The Design-Builder shall provide the services of an experienced and authorized representative of the manufacturer of each item of equipment who shall visit the Project Site and inspect, check, adjust if necessary, and approve the equipment installation during Commissioning. After each manufacturer's representative's pre-operational checkout of equipment required by Section 4.3.1 of this Exhibit, the manufacturer's representative shall witness the Design-Builder's operation of the equipment during the Equipment and Subsystem Testing required by Section 4.4.2 of this Exhibit, to verify proper installation and functional performance of the equipment for adequate time over the full range of conditions. The adjustments required for proper operation and protection of the equipment and operating staff shall be made prior to the System testing required by Section 4.4.3 of this

Exhibit. Upon successful completion of testing, a COPI shall then be provided by the manufacturer's representative for each piece of equipment.

4.4.2 Equipment and Subsystem Testing

Testing of individual equipment, components and subsystems within a system shall be satisfactorily completed prior to commencing testing of the associated system in accordance with Section 4.4.3 of this Exhibit. The Design-Builder shall submit to the City, for the City's information, a written report compiling functional performance results for Equipment and Subsystem Testing, which shall include manufacturers' COPIs for each component, device, and piece of equipment. Certification shall also include a confirmation that the installation complies with the Contract Standards. At a minimum, the following information shall be recorded and submitted as part of the written report:

- 4.4.2.1 Lubrication and service records for each item of mechanical and electrical equipment
- 4.4.2.2 Equipment alignment and vibration measurements
- 4.4.2.3 Logs of electrical tests and measurements
- 4.4.2.4 Instrumentation calibration and testing logs and check lists
- 4.4.2.5 Manufacturers' COPIs as required by Section 4.4.1 of this Exhibit
- 4.4.2.6 Testing and validation of all control and instrumentation inputs, outputs, logic functions, status indication, shutdowns, and alarms. Demonstrate proper operation of each instrument loop function including alarms, local and remote control, monitoring, start-up, and shut-down. Generate signals with test equipment to simulate operating conditions in each control mode.
- 4.4.2.7 Factory and field equipment settings
- 4.4.2.8 Other records, logs, and check lists
- 4.4.2.9 Certification that all equipment, components, and subsystems have been functionally tested and calibrated
- 4.4.2.10 Verification of proper motor rotation, lubrication and mechanical soundness of all equipment

4.4.3 System Testing

Once the Design-Builder has successfully completed testing of all equipment and subsystems in accordance with Section 4.4.2 of this Exhibit, then functional testing of systems, comprised of single or multiple equipment items with appurtenant components, devices, instruments and controls, shall be conducted with an integrated System Test. All items of equipment and components shall be tested as part of a system to the maximum extent possible. Among the systems that shall be successfully tested prior to Acceptance Testing are the following:

- 4.4.3.1 All treatment process equipment and related systems including solids handling, backwashing, and washwater handling
- 4.4.3.2 All pumping and conveyance equipment and related systems
- 4.4.3.3 All chemical storage and feed systems
- 4.4.3.4 Standby and emergency power generation systems and uninterruptible power supply systems
- 4.4.3.5 All gates, valves, and actuators
- 4.4.3.6 Plumbing, heating, ventilation, and cooling equipment and related systems
- 4.4.3.7 Potable and utility water systems
- 4.4.3.8 Drain systems, sump pumps, and overflow alarms

- 4.4.3.9 All connecting utilities
- 4.4.3.10 Communications, SCADA, instrumentation and control, and telemetry systems
- 4.4.3.11 Alarm systems
- 4.4.3.12 Fire protection systems
- 4.4.3.13 Lighting and emergency lighting systems
- 4.4.3.14 Power distribution, switchgear, and motor control equipment
- 4.4.3.15 Health and safety features, equipment, and systems
- 4.4.3.16 Surge protection equipment
- 4.4.3.17 Stormwater collection and conveyance systems
- 4.4.3.18 Other systems as specified by the Contract Documents or required under Good Engineering and Construction Practice to be completed prior to Acceptance Testing
- 4.4.4 To further define the requirements of the above items:
 - 4.4.4.1 System Testing shall be conducted continuously for a minimum of eight hours under full load conditions for each system. If any equipment, subsystem or system malfunctions during their testing, the unit shall be repaired or replaced and the testing re-started.
 - 4.4.4.2 The Design-Builder shall demonstrate the manual and automatic modes of operation to verify proper control sequences, software interlocks, proper operation of software logic and controllers over the full operational range and under actual operating conditions; also testing of automatic shutdowns and alarms. The Design-Builder shall bring each piece of instrumentation and control equipment into service in accordance with manufacturer's recommendations and all calibrations and process parameter set points shall be verified.
 - 4.4.4.3 A SCADA and communications systems test shall be completed by the Design-Builder to verify all equipment and programmed software is operating properly as a fully integrated system, unless limited or prohibited by the operation of the existing system, and that the intended monitoring and control functions are fully implemented and operational.
 - 4.4.4.4 The Design-Builder shall simulate electric power failure and standby power facilities start up to demonstrate that the automatic startup and transfer to the backup system is fully functional and that the control system functions properly.
 - 4.4.4.5 The Design-Builder shall complete testing of all surge protection facilities, valves, and other ancillary devices on the pipeline systems for protection of Project Facilities from damage during testing and operation.
 - 4.4.4.6 Testing of systems that are not identified above may be completed either prior to or during Acceptance Testing. Systems that may be tested prior to or during Acceptance Testing include the following:
 - a Security systems
 - b Irrigation system
- 4.4.5 Achieving Successful Completion of Commissioning

In order for the Design-Builder to achieve successful completion of Commissioning, the following requirements must be met:

 - 4.4.5.1 Successful completion of the preconditions to Commissioning set forth in Section 4.3.1 of this Exhibit, all Equipment and Subsystem Testing, and System Testing.

- 4.4.5.2 Training of City employees completed for the Project Facilities to the extent required by the Contract Standards.
- 4.4.5.3 Completion of the Operation and Maintenance Manual as a pre-final document.
- 4.4.5.4 Grading, paving, and stormwater systems substantially completed to the extent necessary for safe access to and around the Project Facilities and structures and effective storm run-off removal.
- 4.4.5.5 Disinfection of Project Facilities in accordance with the Specifications, City requirements, and TCEQ regulations.
- 4.4.6 Completion and Documentation of Commissioning

Upon completion of Commissioning in accordance with the foregoing requirements, the Design-Builder shall submit a Commissioning Report to the City Engineer that includes the following:

 - 4.4.6.1 All reports and documentation prepared for Equipment and Subsystem Testing.
 - 4.4.6.2 Properly completed, and signed off, checklists, and forms.
 - 4.4.6.3 Completed corrosion system report.
 - 4.4.6.4 Equipment outages, failures/ malfunctions, and preventative maintenance.
 - 4.4.6.5 Summary of test results and conclusive evidence of compliance with all Commissioning requirements.
 - 4.4.6.6 All calculations used in determining test results.
 - 4.4.6.7 Certified laboratory reports with results from testing as required.
 - 4.4.6.8 Other data reasonably requested by the City to be included in such report.
 - 4.4.6.9 All certifications, which shall be signed by the Design-Builder.
 - 4.4.6.10 All other data necessary to demonstrate successful Commissioning in compliance with the Specifications and all other Contract Standards.

4.5 Acceptance Testing

The Design-Builder shall achieve successful completion of Commissioning and shall have been deemed to have achieved Acceptance Test readiness in accordance with this Exhibit prior to commencing Acceptance Testing. In no event shall the Design-Builder deliver Treated Water to the City potable water system prior to obtaining TCEQ and City approvals.

- 4.5.1 Acceptance Testing
 - 4.5.1.1 Acceptance Testing shall be conducted continuously for a minimum of 14 days at the rated production capacity of the Project Facilities. The Design-Builder and the City shall agree to a Raw Water supply schedule and a Treated Water production schedule to be included in the Acceptance Testing Plan that may provide deviations to the full production capacity to account for system demands and other factors. It is anticipated that systems fine-tuning may be required prior to commencement of the 14 day Acceptance Test period, which may require the distribution of Treated Water into the City potable water system.
 - 4.5.1.2 Repeat Acceptance Test when malfunctions or deficiencies cause shutdown or partial operation of the facility or the results in performance are less than specified until continuous operation is achieved over the minimum duration specified in Paragraph 4.5.1.A above.
 - 4.5.1.3 During Acceptance Testing the Design-Builder shall lubricate and maintain all equipment in accordance with the manufacturers' recommendations, clean or replace strainers, screens, and filter elements, and perform all other operations and maintenance duties required, including items required by manufacturers'

operations and maintenance manuals and the Operations and Maintenance Manual.

- 4.5.1.4 The Design-Builder shall keep detailed documentation of conditions during Acceptance Testing on forms provided as part of its Acceptance Testing Plan. The Design-Builder shall provide the City with daily and weekly reports during Acceptance Testing. Each daily report shall be submitted within 24 hours of completion of each day of testing.
- 4.5.1.5 All sampling, including Raw Water sampling, shall be conducted in accordance with the approved Acceptance Testing plan. At a minimum, Raw Water quality sampling shall be conducted once every four hours for the duration of Acceptance Testing.
- 4.5.1.6 At the completion of Acceptance Testing, or during Acceptance Testing as the need arises, the Design-Builder shall dewater, collect, haul, and dispose of all generated solids.
- 4.5.1.7 Filling or "topping-off" of chemical and process tanks and units at the close of Acceptance Testing is not required.

4.5.2 Achieving Acceptance

The Design-Builder shall be responsible for completion of Acceptance Testing in accordance with the Acceptance Testing Plan and the Contract Standards. The purpose of Acceptance Testing is to demonstrate the ability of the Project to satisfy the applicable Acceptance Standards (as listed in this Article 4) under conditions prevailing at the time that the City provides approval to commence Acceptance Testing.

Upon approved completion of Acceptance Testing by the City, the Acceptance Test Report shall be prepared and submitted by the Design-Builder in accordance with the Acceptance Testing Plan and shall be in compliance with the following at a minimum:

- 4.5.2.1 A certification that Acceptance Testing was conducted in accordance with the Acceptance Testing Plan
- 4.5.2.2 Checklists and forms completed and signed off.
- 4.5.2.3 A certification of the results of the Acceptance Testing with respect to each of the Acceptance Standards. Each Acceptance Standard shall be addressed separately and the basis for the determination presented. This certification of the results of the testing shall include a determination of the extent to which the Project complies with the applicable Acceptance Standards.
- 4.5.2.4 All data measured and recorded during the Acceptance Testing including laboratory analyses, chemical consumption, electrical usage, instrument calibrations, pressures, and measurements.
- 4.5.2.5 Record of equipment outages, failures/malfunctions, and preventative maintenance.
- 4.5.2.6 Summary of Acceptance Testing results and conclusive evidence of compliance with all Acceptance Testing requirements. All calculations used in determining test results and comparing results with applicable Acceptance Standards.
- 4.5.2.7 Certified laboratory reports with results from testing.
- 4.5.2.8 Any other data reasonably requested by the City to be included in such reports.
- 4.5.2.9 All certifications shall be signed by the Design-Builder.

4.6 Acceptance Standards

4.6.1 General

This Section 4.6 sets forth certain Acceptance Standards for the Project that must be achieved by the Design-Builder during Acceptance Testing. Further Acceptance Standards, including standards associated with chemical and power utilization, will be developed during the Preliminary Services phase of the Project and included in the Specifications or a Definitive Contract Amendment.

4.6.2 Treated Water Quality Acceptance Standards

Treated Water quality acceptance standards must be achieved at the point of discharge to the potable water system downstream of the last treatment unit. The Project Facilities must continuously achieve the drinking water standards governing drinking water quality and reporting requirements for public water systems as specified in the Texas Administrative Code Chapter 290, Subchapter F including all secondary standards specified therein. In addition, the following must also be continuously achieved:

- 4.6.2.1 Unit filter run volumes (UFRV) must be maintained at or above 10,000 gallons/square foot of media.
- 4.6.2.2 The overall disinfection inactivation ratio (IR) for the Project Facilities must achieve a goal of 2.0 and must never be less than 1.75. The IR is defined as the log removal achieved through the approved disinfection zones divided by the log removal required for the given operating and water quality conditions.
- 4.6.2.3 Total haloacetic acid (THAAs) concentrations must be less than or equal to 48 ug/L for every sample.
- 4.6.2.4 Total trihalomethane (TTHMs) concentrations must be less than or equal to 64 ug/L for every sample.
- 4.6.2.5 Individual filter effluent turbidity must be less than or equal to 0.1 NTU in at least 95% of samples.
- 4.6.2.6 Taste and odors in the treated water must be below a threshold odor number (TON) value of 2.0 in 95% of samples.
- 4.6.2.7 A Treated Water LSI value must be maintained between -0.20 and +0.20 for 95% of samples.
- 4.6.2.8 Settled water turbidity must be maintained at 2.0 NTU or less on a continuous basis.
- 4.6.2.9 Turbidity spikes following filter backwash must be maintained at or below 0.3 NTU.
- 4.6.2.10 Filter effluent turbidity values must be at or below 0.1 NTU within 15 minutes following a filter backwash

The Treated Water Quality Acceptance Standards must be achieved over a range of Raw Water quality conditions to be developed during the Preliminary Services phase of the Project and specified in a Definitive Contract Amendment (the "Specified Raw Water Quality Parameters").

All analytical methods and protocols used for Acceptance Testing monitoring shall be conducted according to methods approved by the TCEQ. In the event that an analysis does not have an approved method from the TCEQ, currently approved USEPA methods shall be acceptable.

Raw Water samples are to be collected from the raw water pipeline immediately upstream of recycle and the point of initial chemical addition. Treated Water samples are to be collected

from the discharge header from the high service pump station downstream of the last chemical addition point and upstream of the take-off for potable distribution for internal plant usage. All monitoring is to be conducted at the frequencies required in TCEQ regulations except as modified or otherwise noted in Table 4-1 below. Sampling shall occur at the required frequencies for the full duration of Acceptance Testing, including retesting durations.

Table 4.1 – Sampling Frequency during Acceptance Testing

Parameter	Sampling Frequency During Acceptance Testing
TSS – Raw Water Grab Samples	Once Daily
IOCs, SOCs, VOCs – Raw Water and Treated Water	Once
Turbidity – Each pretreatment basin, individual filters	Continuous
TOC/DOC – Raw Water , settled water, Treated Water	Once Daily
Alkalinity, hardness, calcium, pH, temperature, charge potential, UV254 (Raw Water and Treated Water)	Daily, every four hours
DBPs: TTHMs, HAA5, Bromate – Treated Water Grab Samples (1 hour, 72 hour, and 7 day formations)	Two per week
Iron and Manganese – Treated Water Grab Samples	Twice Daily
Arsenic – Treated Water Grab Samples	One per week
Total Coliform – Treated Water Grab Samples	Two per week
Heterotrophic Plate Count – Treated Water Grab Samples	Two per week
Ozone – Preoxidant and Ozone Contactor Pipe	Continuous
pH – Treated Water	Continuous
Fluoride - Treated Water	Continuous
Apparent Color – Treated Water Grab Samples	Once Daily
Apparent Color – Raw Water Grab Samples	Once Daily
Primary and Secondary Standards not Otherwise Listed Above – Raw and Treated Water Grab Samples	Once Daily
Geosmin and MIB (Raw Water and Treated Water – Paired Samples)	Two per week

The Design-Builder shall demonstrate that the Project Facilities achieve all of the Acceptance Standards according to the sample frequency in Table 4-1 of this Section.

Article 5 - Transition Services

5.1 Purpose

The purpose of this Article 5 of Exhibit G is to describe: (a) certain requirements for the development of the Operations and Maintenance Manual, the Service Manuals and the Asset Management System; (b) certain requirements concerning the training of City staff by the Design-Builder; and (c) certain expected Transition Services responsibilities of the Design-Builder. The final scope of the Transition Services and the Transition Services Fee will be established in the GMP Amendment. The scope of the Transition Services, as finally established in the GMP Amendment, will include further Design-Builder performance responsibilities during the Transition Period where by Design-Builder will guarantee that Treated Water Quality Acceptance Standards are achieved for the duration established in the GMP Amendment.

5.2 Operations and Maintenance Manual

5.2.1 Development by the Design-Builder

The Operations and Maintenance Manual shall be a secured online, electronic manual with hard copy reproduction capability. The Design-Builder shall develop the Operations and Maintenance Manual as part of the Final Design and Construction in accordance with the Specifications and all other Contract Standards. The Design-Builder shall provide the City with preliminary, interim, pre-final and final

versions of the Operations and Maintenance Manual for the City's review, comment and approval. A pre-final Operations and Maintenance Manual shall be submitted to and approved by the City as a condition precedent to the commencement of Acceptance Testing. The pre-final version shall incorporate agreed-to comments from previous versions and shall be suitable for use as a functional reference document during Acceptance Testing. A final Operations and Maintenance Manual shall be submitted to and approved by the City as a condition precedent to the achievement of Final Completion, and it shall incorporate information and modifications learned through completion of the Acceptance Testing. The Design-Builder shall update the Operations and Maintenance Manual, as and to the extent required by the Contract Standards, during the Transition Period.

5.2.2 Content of the Operations and Maintenance Manual

The Operations and Maintenance Manual shall (i) include the practices and procedures necessary for Project Facilities operation and control, auxiliary facility equipment and systems, system maintenance, repair and replacement, and grounds and buildings maintenance; and (ii) integrate all Service Manuals. The Operations and Maintenance Manual will be comprehensive, suitable as a resource for training operational staff, and will include the following information:

- 5.2.2.1 process design criteria;
- 5.2.2.2 Project Facilities layout drawings and process flow diagrams;
- 5.2.2.3 detailed operation and control procedures;
- 5.2.2.4 standard operating procedures;
- 5.2.2.5 emergency response procedures;
- 5.2.2.6 system troubleshooting procedures;
- 5.2.2.7 maintenance instructions, including:
 - a information necessary to properly assemble and install the equipment, including alignment, clearances, tolerances and interfacing equipment requirements; the trade and skill level required to install the equipment; any special rigging required to place the equipment; and any special test equipment required to place the equipment in service;
 - b manufacturer's schedule for routine preventive maintenance, calibration, lubrication, inspections, tests, and adjustments required to ensure proper and economical operation and to minimize corrective maintenance and repair;
 - c manufacturer's projection of preventive maintenance man-hours on a daily, weekly, monthly, and annual basis, including required trades and skill levels required for performance of maintenance and the total time required to perform the work;
 - d manufacturer's troubleshooting guide and recommendations on procedures and instructions for correcting problems and making repairs;
 - e step-by-step procedures to isolate the cause of typical malfunctions, describing clearly why the checkout is performed and what conditions are to be sought;
 - f a description of maintenance and operating tools, replacement parts and materials, including specified quantity of spare parts;
 - g information available from the manufacturers to use in training personnel to maintain the equipment and systems properly;
 - h information on test equipment required to perform specified tests and/or special tools needed for the maintenance and repair of components;
 - i instructions related to when equipment is in operation, including lubrication requirements;

- j all warranty information, including effective warranty dates;
 - k Governmental Approvals indicating approval of all installations requiring permits; and
 - l the development of asset records and the means to assess equipment condition in coordination with the CMMS;
- 5.2.2.8 a long-term schedule of major repairs and replacements, including a long-term budgeting plan to maintain the operability, durability and reliability of the Project Facilities through their projected operational life;
- 5.2.2.9 the practices and procedures necessary to maintain the appearance of the buildings, grounds and landscaping of the Project Facilities;
- 5.2.2.10 procurement procedures for all additional tools, equipment, maintenance supplies and component parts necessary for the operations and maintenance of the Project Facilities, including specifications and quantity of the items to be procured and procedures for planning and scheduling delivery of such items; and
- 5.2.2.11 any other information required by Section 15(e) of the TWDB Supplemental Conditions and Instructions.
- 5.2.3 SCADA Information and Electronic Requirements
- A separate binder will be included in the Operations and Maintenance Manual for the SCADA system operations. The binder will include hard and soft copies of all SCADA programs incorporated in the Project Facilities. The Operations and Maintenance Manual will cover all process, electrical, instrumentation, and control equipment in the Project Facilities as secure digital electronic files that are designed for both web-based and local network access with capability to be linked and coordinated with other City systems at the Existing Plant and as otherwise required by the Contract Documents. The Design-Builder shall:
- 5.2.3.1 provide links within the final Operations and Maintenance Manual to digital files of all Record Documents, individual equipment service manuals, and the CMMS data base entries relevant to the equipment and functions described;
 - 5.2.3.2 provide special secure applications and links required to permit access to the final Operations and Maintenance Manual files from hand-held electronic devices and other portable or fixed electronic devices designated by the City; and
 - 5.2.3.3 coordinate digital Operations and Maintenance Manual development with the City's information technology group to determine compatibility with currently available hardware and software in the City network.

5.3 Service Manuals

The Design-Builder shall develop the Service Manuals as part of the Final Design and Construction in accordance with the Specifications and all other Contract Standards. The Service Manuals shall be incorporated into the Operations and Maintenance Manual and shall include the practices and procedures necessary for the operation and control, maintenance, and repair and replacement of each equipment system, package, or unit incorporated into the Project Facilities. The Service Manuals shall be suitable as a resource for operating and maintaining the components of the Project Facilities, and shall include the following information:

- 5.3.3.1 safety information for each equipment system, package or unit incorporated into the Project Facilities, including mechanical and electrical lockout procedures for all Project Facilities components; and
- 5.3.1.2 descriptions of units or systems and component parts, their functions, operating characteristics and limiting conditions, including:
 - a equipment summary, which will include nameplate data, supplier, manufacturer and local representative;

- b start-up sequences, including inspections required before initiation of sequence;
- c performance monitoring requirements to confirm proper operation and guide component control adjustments;
- d adjustment of variable functions and settings;
- e interface among the components and systems of the Project Facilities;
- f troubleshooting guidelines to identify non-performing components and identify probable cause;
- g shut-down sequences and lock-out requirements to safely remove components from service without adverse impact on system performance;
- h preparation to isolate off-line equipment piping, power, and controls for safe execution of maintenance activities; and
- i description of instrumentation and control system, including alarm summary.

5.4 Asset Management System

5.4.1 City Asset Management System

The City utilizes an Asset Management System at the Existing Facility for:

- 5.4.1.1 tracking and managing preventive, predictive, and corrective maintenance tasks
- 5.4.1.2 recording and creating equipment maintenance histories;
- 5.4.1.3 scheduling and control of preventive, predictive and corrective maintenance tasks;
- 5.4.1.4 issuing notifications and work orders for preventive, predictive, and corrective maintenance tasks;
- 5.4.1.5 tracking inventories and locations of equipment, materials, costs, component parts and spare parts;
- 5.4.1.6 Other purposes.

5.4.2 Requirements for the Asset Management System

The Design-Builder shall perform the following in support of City's Asset Management System:

- 5.4.2.1 Perform asset tagging of all components, devices, equipment, and other items as required by City asset tagging convention.
- 5.4.2.2 Create, maintain, populate, revise, and update as needed a database of tagged assets with information fields as required by City for all tagged assets. Data entries shall be coordinated and consistent with information contained in Operations and Maintenance Manual and Service Manuals. Database shall be developed for direct importation into City's Asset Management System

(Infor Enterprise Asset Management, Version 10.1.2 Build 201311 or computerized maintenance management information system/software version in use by the City at the time of database importation).
- 5.4.2.3 Assist City with importation of information into Asset Management System and verification of information once imported.

5.5 Training of City Staff

5.5.1 Generally

The Design-Builder shall be responsible for training City staff in the operations and maintenance of the Project Facilities in accordance with the Contract Standards. Training will

commence during the performance of Final Design and Construction. The Design-Builder must satisfy specified training obligations under the Training Plan in order for Substantial Completion to occur. The Design-Builder shall provide the services of trained specialists to instruct City staff in the operation and maintenance of identified equipment and system components.

5.5.2 Minimum Hours of Training

The Design-Builder shall provide sufficient training and education to City staff to enable them to operate and maintain the Project Facilities beginning on the Date of Substantial Completion. The Training Plan shall establish the hours of training that will be provided prior to the Date of Substantial Completion and, if necessary, any further training that will be provided during the Transition Period, subject to the approval of the Project Director.

5.5.3 Training Plan

During Final Design and Construction, the Design-Builder shall develop a Training Plan in accordance with the Contract Standards. The City's approval of the Training Plan shall be a condition precedent to the commencement of Commissioning. The Training Plan shall:

- 5.5.3.1 include a combination of classroom and field/maintenance shop training;
- 5.5.3.2 be designed to completely train City staff to competently operate and maintain the Project Facilities with the systems theory, sequence of operations, component and functional descriptions, standard operating procedures, hazard analysis of equipment, safety features, emergency procedures, assembly, disassembly, preventive, corrective and predictive maintenance, internal and external wiring, control loop, schematics, and diagrams of all components;
- 5.5.3.3 list all equipment and systems in the Project Facilities, including the following information for each equipment package or system:
 - a a description of each equipment package or system with reference to Drawings and Specifications, as appropriate;
 - b identification of target audiences (i.e. operators, mechanical maintenance, electrical maintenance, instrumentation maintenance);
 - c duration of classroom training for each session and each audience; and
 - d duration of hands-on training for each session and each
- 5.5.3.4 include the number, qualifications, and certification levels of City staff.

5.5.4 Performance of Training

The Design Builder shall:

- 5.5.4.1 perform training in accordance with the Training Plan and all other applicable Contract Standards, including any personnel training guidelines, policies, and procedures established:
 - a in any permit or operator's certificate required or issued by any Governmental Authority;
 - b by any applicable equipment manufacturer; and
 - c in any other Applicable Law; and
- 5.5.4.2 schedule additional training, if necessary, during the Transition Period so as not to interfere with the operations and maintenance of the Project Facilities.

5.6 City Operation of the Project Facilities

5.6.1 Generally

Beginning on the Date of Substantial Completion, the City shall operate, maintain and manage the Project Facilities in accordance with Applicable Law and the standards established by the following (collectively, the "Operating Standards"):

- 5.6.1.1 the Operations and Maintenance Manual;
- 5.6.1.2 the Service Manuals; and
- 5.6.1.3 the Asset Management System.

The City shall have authority over all Project Facilities operations, maintenance and management decisions during the Transition Period, subject to any terms and conditions that may be specified in the GMP Amendment to address any further testing responsibilities of the Design-Builder during the Transition Period. The City shall coordinate with the Transition Services Manager on a continuous basis throughout the Transition Period in connection with the Transition Services.

5.6.2 Operations and Maintenance Records

Beginning on the Date of Substantial Completion, the City shall track and perform all operations and maintenance activities in accordance with the Operating Standards. The Design-Builder shall develop all report templates for routine compliance and process monitoring.

5.7 Design-Builder Responsibilities Generally

5.7.1 Operating Standards

The Design-Builder shall perform the Transition Services in accordance with all applicable Contract Standards. The Design-Builder acknowledges that it is responsible for developing the Operating Standards to enable the City to operate, maintain and manage the Project Facilities during the Transition Period in accordance with Good Operating Practice and to achieve continued compliance with the performance requirements established by the Acceptance Standards. Such performance requirements are referred to in this Part 5 as the "Performance Guarantees".

5.7.2 Transition Services Manager and Personnel

The Design-Builder shall designate an individual to serve as the Transition Services Manager during the Transition Period and shall provide such other personnel as are necessary to perform the Transition Services. The Transition Services Manager and all other Transition Services personnel shall be subject to the reasonable approval of the Project Director and Section 3.6 of the Agreement.

5.7.3 Access to the Project Facilities

The Transition Services Manager and all other approved Transition Services personnel shall have access to the Project Facilities during the Transition Period for the purpose of inspecting, monitoring, and observing the City's operations and maintenance of the Project Facilities and performing all other Transition Services. The City shall provide such individuals, as necessary, with keys or passwords, as applicable, for the Project Facilities or structures comprising the Project Facilities in accordance with the City's physical security plan and key control program. The Design-Builder shall ensure that all Transition Services personnel comply with the City's operating and safety procedures and rules, and will not interfere with the City's operations of the Project Facilities.

5.7.4 Access to Data and Records

The Transition Services Manager and other approved Transition Services Personnel shall have real time, continuous computer access to the records and data required to be maintained pursuant to Section 5.6.2, including hard copy reproduction capability, through information systems installed by the Design-Builder prior to the commencement of the Transition Period in accordance with the Agreement.

5.8 General Transition Services

5.8.1 Monitoring and Consulting

The Design-Builder, through the Transition Services Manager and other approved Transition Services personnel, shall monitor the City's operations and maintenance of the Project Facilities during the Transition Period and provide advice and consultation to the City, as necessary, to optimize the performance of the Project Facilities. The Design-Builder's monitoring and consultation obligations shall include the following:

- 5.8.1.1 assist and advise the City in performing all environmental and regulatory monitoring required under Applicable Law;
- 5.8.1.2 review and comment on all regulatory filings prior to submittal by the City to the appropriate Governmental Authority;
- 5.8.1.3 assist and advise the City in preparing and maintaining the data and records required pursuant to Section 5.6.2, including implementation of the CMMS;
- 5.8.1.4 assist and advise the City in implementing the Operations and Maintenance Manual and Service Manuals prepared by the Design-Builder;
- 5.8.1.5 prepare updates, as necessary, to the Operations and Maintenance Manual, CMMS, Service Manuals and Training Plan, during the Transition Period;
- 5.8.1.6 provide City with recommendations on staff development and operating responsibilities as they relate to Good Operating Practice;
- 5.8.1.7 assist and advise the City in implementing operations and maintenance practices that will achieve continued compliance with the Performance Guarantees;
- 5.8.1.8 assist and advise the City in implementing response measures consistent with Good Operating Practice in the event of the receipt of Raw Water of a quality outside of the Specified Raw Water Quality Parameters;
- 5.8.1.9 advise the City on the operations and maintenance practices necessary to minimize the actual costs of operating and maintaining the Project Facilities in a manner consistent with Good Operating Practice;
- 5.8.1.10 assist and advise the City immediately in responding to complaints;
- 5.8.1.11 assist and advise the City immediately in responding to emergencies; and
- 5.8.1.12 assist and advise the City in the administration of equipment warranties and claims, subject to the Design-Builder's obligations under the Project Warranties.

5.8.2 Failure of Compliance with the Performance Guarantees

In addition, in the event of a failure of the Project Facilities to meet any Performance Guarantee during the Transition Period, the Transition Services Manager shall promptly (within 24 hours or within such shorter period as may be required under Good Operating Practice) provide troubleshooting and recommendations to the City for the implementation of changes to the operations, maintenance and management practices that are necessary under Good Operating Practice to promptly correct the failure to meet the Performance Guarantees and resume compliance with the Performance Guarantees.

5.9 Reporting

The Design-Builder shall provide prompt notice and recommend corrective action to the City (within 24 hours or within such shorter period as may be required under Good Operating Practice) in the event of any observed failure of compliance with the Operating Standards. If any such notice and recommendation is made orally, it shall be memorialized in writing within two business days following the event. The Design-Builder shall maintain a daily log of Transition Services, including all communications with the City, and will make such daily log available to the City upon request. The

Design-Builder shall provide the City with a certified monthly report during the Transition Period, which will:

- 5.9.1 summarize the activities of the Transition Services Manager and all other Transition Services personnel during the month;
- 5.9.2 summarize all notices and recommendations made during the month, including identification of any observed failures of compliance with the Operating Standards and recommended corrective action plans to address any failure of compliance with the Performance Guarantees and summarize the progress and status of previously recommended corrective actions;
- 5.9.3 indicate the extent to which the Project Facilities achieved compliance with the Performance Guarantees for the month, including complete performance data analysis, summary of statistical parameters, comparison with permit limits and Performance Guarantee levels, and trend analysis;
- 5.9.4 provide an evaluation of City staff performance and productivity for the month; and
- 5.9.5 identify and summarize all defects and all Warranty Work performed by the Design- Builder during the month.

The Design-Builder shall provide each such report within five business days following the end of each month during the Transition Period, and the Transition Services Manager shall meet with the City within five business days following delivery of the report to review the contents of the report and all matters pertaining to the operations and maintenance of the Project Facilities and the Transition Services. Within 10 days following such meeting, the Transition Services Manager will re-issue the report to include the City's comments and clearly noting and describing any disagreements. Within 30 days following the end of each year during the Transition Period, the Transition Services Manager will provide an annual report regarding the Transition Services, including a summary of all information contained in the monthly reports as well as a summary of all outstanding operations and maintenance issues or disagreements.

5.10 No Limitation on Final Design and Construction

The Design-Builder shall perform all Final Design and Construction identified in the Contract Documents as required to be performed by the Design-Builder following the Date of Substantial Completion, including all Warranty Work.

**COH Flowdown - Exhibit K – Equal Employment Opportunity Requirements
(City of Houston Information Requirements
for the Successful PROPOSER on All Construction Contracts)**

**DOCUMENTS THAT MUST BE SIGNED AND RETURNED TO THE CITY OF HOUSTON PRIOR TO FINAL
EXECUTION OF CONTRACT**

Certification by Design-Builder Regarding Equal Employment Opportunity	Attachment 1
Total Work Force Composition of the company <i>Or in lieu thereof, a copy of the latest Equal Employment Opportunity Commission's EEO-1 Form (This information is required only if the Design-Builder has a work force of 50 or more people and the Contract is \$50,000 or more.)</i>	Attachment 2
Company's Equal Employment Opportunity Compliance Program	Attachment 3
INFORMATION THAT MUST BE SUPPLIED DURING THE COURSE OF THE WORK	
Certification By Proposed Subcontractor Regarding Equal Employment Opportunity	Attachment 4
Subcontractor's Equal Employment Opportunity Compliance Program	Attachment 5
Certification by Proposed Material Suppliers, Lessors, and Professional Service Providers Regarding Equal Reemployment Opportunity	Attachment 6

PLEASE COMPLETE ATTACHMENTS 1 THROUGH 6 AND MAIL TO:

City of Houston
Office of Business Opportunity
Contract Compliance Section
611 Walker, 7th Floor
Houston, Texas 77002
Attention: Director

The remainder of the reports can be mailed at the appropriate time.

Article 1 – Certification by Design-Builder Regarding Equal Employment Opportunity

The following are Equal Employment Opportunity requirements to be met and documents to be submitted to:

**Mayor's Office of Business Opportunity
Contract Compliance Section
611 Walker, 7th Floor
Houston, Texas 77002**

Under the conditions and terms of the Contract Documents, the Design-Builder is responsible for all Equal Employment Opportunity compliance, including subcontractor compliance.

Article 2 – Equal Opportunity Forms (Attachments 1 thru 6)

These forms are submitted by the Design-Builder at the beginning of the Project and as requested:

Attachments 1, 2, and 3 by the Design-Builder

These forms are submitted by all subcontractors before they begin work on the project.

Attachments 4 and 5 by subcontractors

This form is submitted by all suppliers, lessors, or professional services providers before they begin work on the project:

Attachment 6

Article 3 – Posting

The following poster should be clearly displayed on each job site, or in case of annual service agreements, in the Design-Builder's office:

Equal Employment Opportunity is the Law Poster.

Article 4 – Job Site Visits

Site visits will be made by a Contract Compliance Officer who will make their presence known to the Project Manager, Supervisor, or Foreman, and will conduct interviews with employees on site.

Article 5 – Payment and Evaluation

Upon completion of the Project, as part of the contract-awarding department's total clearance process, the Office of Business Opportunity's Contract Compliance Section must certify to the department that all EEO compliance requirements have been met.

Article 1 – Certification by Design-Builder Regarding Equal Employment Opportunity

1.1 General

In accordance with Executive Order 11246 (30 F.R. 12319-25), the implementing rules and regulations thereof, and orders of the Secretary of Labor, a certification regarding Equal Opportunity is required of prospective contractors and their proposed subcontractors prior to the award of contracts or subcontracts. Please complete Attachment 1 (Certification of Design-Builder) to satisfy these requirements.

Attachment 1 – Certification of Design Builder

Design-Builder's Name: _____

Address: _____

Telephone Number: _____ Fax: _____

Name of the company's EEO Officer: _____

Web Page/URL Address: _____

IRS Employer Identification Number: _____

Work to be performed: _____

Project No: _____

Participation in a previous contract or subcontract. _____

Design-Builder has participated in a previous contract or subcontract subject to the Equal

YES ☐ NO ☐

Compliance reports were required to be filed in connection with such contract or subcontract.

YES ☐ NO ☐

Design-Builder has filed all compliance reports required by Executive
Orders 10925, 11114, 11246, or by regulations of the Equal
Employment Opportunity Commission issued pursuant to
Title VII of the Civil Rights Act of 1964.

YES ☐ NO ☐

If the answer of Item C. is still "NO", please explain in detail on reverse side of this certification

Dollar amount of bid \$ _____

Anticipated performance period in day _____

Expected total number of employees to perform the proposed construction: _____

Non-segregated facilities.

Notice to prospective federally-assisted construction contractors:

A Certification of Non-Segregated Facilities, as required by the May 9, 1967, Order (32 F.R. 7439, May 19, 1967) on Elimination of Segregated Facilities, by the Secretary of Labor, must be submitted to the recipient prior to the award of a federally-assisted construction contract exceeding \$10,000 which is not exempt from the provisions of the Equal Opportunity Clause.

Design-Builders receiving federally-assisted construction contract awards exceeding \$10,000 which are not exempt from the provisions of the Equal Opportunity Clause will be required to provide the forwarding of the following notice to prospective subcontractors for supplies and construction contracts where the subcontracts exceed \$10,000 and are not exempt from the provisions of the Equal Opportunity Clause.

The federally-assisted construction Design-Builder certifies that he/she does not maintain or provide any segregated facilities at any of his/her establishments, and does not permit employees to perform their services at any location, under his/her control, where segregated facilities are maintained. The federally-assisted construction Design-Builder certifies further that he/she will not maintain or provide segregated facilities at any of his/her establishments, and will not permit employees to perform their services at any location, under his/her control, where segregated facilities are maintained. The federally assisted construction Design-Builder agrees that a breach of this certification is a violation of the Equal Opportunity Clause in this Contract. As used in this certification, the term "segregated facilities" means any waiting rooms, work areas, restrooms and washrooms, restaurants and other eating areas, time clocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees which are segregated by explicit directive or are in fact segregated on the basis of race, creed, color, or national origin because of habit, local custom, or otherwise. The federally-assisted construction Design-Builder agrees that

(except where he/she has obtained identical certifications from proposed Subcontractors for specific time periods) he/she will obtain identical certifications in duplicate from proposed Subcontractors prior to the award of subcontracts exceeding \$10,000 which are not exempt from the provisions of the Equal Opportunity Clause, and that he/she will retain the duplicate of such certifications in his/her files. The Subcontractor will include the original in his/her bid package.

Race or ethnic group designation of Design-Builder. Enter race or ethnic group in appropriate box:

☐

White

☐

Black

☐

Hispanic

☐

Pacific Islander, Asian

☐

American Indian, Aleut.

Gender of Owner :

☐

Male

☐

Female

Remarks: _____

Certification - The information above is true and complete to the best of my knowledge and belief.

Company Officer (Please Type)	
Signature	Date

NOTE: The penalty for making false statements in offers is prescribed in 18 U.S.C. 1001.

2564933.1.039257

Attachment 2 - City of Houston Company Wide EEO Report

1. Check One ____ Prime ____ Subcontractor		2. Name and Address										3. FEID No.																	
4. County												5. TN CSJ DOG Project # (If Applicable)																	
6. Contractor's Beginning Work Date on Project					7. City of Houston Contract No.					8. This report is based on Pay Period ending MM/DD/YYYY																			
9. TEXAS CONSTRUCTION EMPLOYMENT																													
TABLE 1															TABLE B														
Job Categories	TOTAL EMPLOYEES		TOTAL MINORITIES		WHITE (Not of Hispanic)		BLACK (Not of Hispanic Origin)		AMERICAN INDIAN or ALASKAN		ASIAN		NATIVE HAWAIIAN or OTHER		TWO or MORE RACES		On-the-job Training (OJT)												
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F											
OFFICIALS	0	0	0	0																									
MANAGERS	0	0	0	0																									
SUPERVISORS	0	0	0	0																									
FOREMEN/WOMEN	0	0	0	0																									
ADMIN SUPPORT	0	0	0	0																									
EQUIPMENT OPERATORS	0	0	0	0																									
MECHANICS	0	0	0	0																									
TRUCK DRIVERS	0	0	0	0																									
IRONWORKERS	0	0	0	0																									
CARPENTERS	0	0	0	0																									
CEMENT MASONS	0	0	0	0																									
ELECTRICIANS	0	0	0	0																									
PIPEFITTERS	0	0	0	0																									
PLUMBERS	0	0	0	0																									
PAINTERS	0	0	0	0																									
LABORERS, SEMI SKILLED	0	0	0	0																									
LABORERS, UNSKILLED	0	0	0	0																									
TOTALS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0													
															OJT Totals														
TABLE C																													
On the job trainee																													
10. If any employees reported in Table A are Apprentices, Name of the Program, Job Category, Count, Race & Sex																													
11. Summarize all hires for the entire active month by job category, race, sex (Use additional sheet if Needed)																													
					Printed Name (First/Last)					Email address					Phone					Signature					Date				
12. Preparer																													
13. Reviewer																													

Attachment 3 – Equal Employment Opportunity Compliance Program for...

Name of Company

The Company's Office of Business Opportunity Program shall consist of documented good faith efforts to comply with the goals, timetables, and objectives set forth in the following Affirmative Action steps:

- A. City of Houston's Specific Equal Employment Opportunity Policy and Clause as contained in City Council Ordinance No. 78-1538, passed August 9, 1978.
- B. Notice of Requirement for Office of Business Opportunity to ensure Equal Employment Opportunity (Executive Order 11246).
- C. Standard Federal Equal Employment Opportunity Construction Contract Specifications (Executive Order 11246).

Project _____

Company Officer (Please Type)

Signature

Date

NOTE: The penalty for making false statements in offers is prescribed in 18 U.S.C 1001

Article 2 – Special Provisions - Specific Equal Employment Opportunity Policy

2.1 General

- 2.1.1 Equal employment opportunity requirements not to discriminate and to take affirmative action to assure equal employment opportunity are required by Executive Order 11246, as amended. The requirements set forth in these Special Provisions shall constitute the specific affirmative action requirements for Project activities under this Contract and shall supplement the notice of requirement for affirmative action to ensure equal employment opportunity and standard federal equal employment opportunity construction contract specifications.
- 2.1.2 The Design-Builder shall work with the City and the Federal Government in carrying out equal employment opportunity obligations and in their review of his/her activities under the Contract.
- 2.1.3 The Design-Builder and all Subcontractors holding subcontracts of \$10,000 or more shall comply with the following minimum specific requirement activities of equal employment opportunity. The Design-Builder shall include these requirements in every subcontract of \$10,000 or more with such modification of language as is necessary to make them binding on the Subcontractor.

2.2 Equal Employment Opportunity Policy

The Design-Builder shall accept as his/her operating policy the following statement which is designed to further the provision of equal employment opportunity to all persons without regard to their race, age, color, religion, sex, or national origin, and to promote the full realization of equal employment opportunity through a positive continuing program: It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, color, sex, or national origin. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship.

2.3 Equal Employment Opportunity Officer

The Design-Builder shall designate and make known to the City contracting officers an equal employment opportunity officer (hereinafter referred to as the EEO Officer) who must be capable of effectively administering and promoting an active Design-Builder program of equal employment opportunity and who must be assigned adequate authority and responsibilities to do so.

2.4 Dissemination of Policy

- 2.4.1 All members of the Design-Builder's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement the Design-Builder's equal employment opportunity policy and contractual responsibilities to provide equal employment opportunity in each grade and classification of employment. To ensure that the above agreement will be met, the following actions shall be taken as a minimum:
 - 2.4.1.1 Periodic meetings of supervisory and personnel office employees shall be conducted before the start of work and then not less often than once every six months, at which time the Design-Builder's equal employment opportunity policy and its implementation will be reviewed and explained. The meetings shall be conducted by the EEO Officer or other knowledgeable company official.
 - 2.4.1.2 All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, or other knowledgeable company official, covering all major aspects of the Design-Builder's equal employment opportunity obligations, within 30 days following their reporting for duty with the Design-Builder.

2.4.1.3 The EEO Officer or appropriate company official shall instruct all employees engaged in the direct recruitment of employees for the Project relative to the methods followed by the Design-Builder in locating and hiring minorities and females.

2.4.2 In order to make the Design-Builder's equal employment opportunity policy known to all employees, prospective employees, and potential sources of employees, i.e., schools, employment agencies, labor unions (where appropriate), college placement officers, etc., the Design-Builder shall take the following actions:

2.4.2.1 Notices and posters setting forth the Design-Builder's equal employment opportunity policy shall be placed in areas readily accessible to employees, applicants for employment, and potential employees.

The Design-Builder's equal employment opportunity policy and the procedures to implement such policy shall be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

2.5 Recruitment

2.5.1 When advertising for employees, the Design-Builder shall include in all advertisements for employees the notation "An Equal Opportunity Employer". All such advertisements will be published in newspapers, or other publications, having a large circulation among minority groups in the area from which the Project work force would normally be derived.

2.5.2 The Design-Builder shall, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee-referral sources likely to yield qualified minority-group applicants, including, but not limited to, State employment agencies, schools, colleges, minority-group organizations, and female recruitment agencies. To meet this requirement, the Design-Builder shall, through his/her EEO Officer, identify sources of potential minority and female employees, and establish with such identified sources procedures whereby such group applicants may be referred to the Design-Builder for employment consideration.

In the event the Design-Builder has a valid bargaining agreement providing for exclusive hiring hall referrals, he/she is expected to observe the provisions of that agreement to the extent that the system permits the Design-Builder's compliance with equal employment opportunity Contract provisions. (The U. S. Department of Labor has held that where implementation of such agreements has the effect of discriminating against minorities or women, or obligates the Design-Builder to do the same, such implementation violates Executive Order 11246 as amended).

2.5.3 The Design-Builder shall encourage his/her present employees to refer female or minority-group applicants for employment by posting appropriate notices or bulletins in areas accessible to all such employees. In addition, information and procedures with regard to referring such applicants will be discussed with employees.

2.6 Personnel Actions

2.6.1 Wage, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff and termination, shall be taken without regard to race, color, religion, sex, national origin, or age. The following procedures shall be followed:

2.6.1.1 The Design-Builder shall conduct periodic inspections of Project sites to ensure that working conditions and employee facilities do not indicate discriminatory treatment of Project-site personnel.

2.6.1.2 The Design-Builder shall periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.

2.6.1.3 The Design-Builder shall periodically review selected personnel actions in depth to determine whether there is evidence of discrimination.

Where evidence is found, the Design-Builder shall promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.

2.6.1.4 The Design-Builder shall promptly investigate all complaints of alleged discrimination made in connection with his/her obligations under this Contract, shall attempt to resolve such complaints, and shall take appropriate corrective action. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the Design-Builder shall inform every complainant of all avenues of appeal.

2.7 Training and Promotion

2.7.1 The Design-Builder shall assist in locating, qualifying, and increasing the skills of minority groups and women employees and applicants for employment.

2.7.2 Consistent with the Design-Builder's work force requirements and as permissible under Federal and State regulations, the Design-Builder shall make full use of training programs, i.e., apprenticeship and on-the-job training programs, for the geographical area of Contract performance.

2.7.3 The Design-Builder shall advise employees and applicants for employment of available training programs and entrance requirements for each.

2.7.4 The Design-Builder shall periodically review the training and promotion potential of minority-group and women employees and shall encourage eligible employees to apply for such training and promotion.

2.8 Unions

If the Design-Builder relies in whole or in part upon unions as a source of employees, he/she shall use his/her best efforts to obtain the cooperation of such unions to increase minority groups and women within the unions, and to effect referrals by such unions of minority and female employees. Actions by the Design-Builder, either directly or through a contractor's association acting as his/her agent, will include the procedures set forth below:

2.8.1 The Design-Builder shall use best efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minority-group members and women for membership in the unions and increasing the skills of minority-group employees and women so that they may qualify for higher-paying employment.

2.8.2 The Design-Builder shall use best efforts to incorporate an equal employment opportunity clause into all union agreements to the end that such unions will be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, or age.

2.8.3 The Design-Builder is to obtain information as to the referral practices and policies of the labor union, except that to the extent such information is within the exclusive possession of the labor union, and such labor union refuses to furnish such information to the Design-Builder, the Design-Builder shall so certify to the City and shall set forth what efforts have been made to obtain such information.

2.8.4 In the event the union is unable to provide the Design-Builder with a reasonable flow of minority and women referrals within the time limit set forth in the collective bargaining agreement, the Design-Builder shall, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, age, sex, or national origin, making full efforts to obtain qualified and/or qualifiable minority group persons and women. (The U. S. Department of Labor has held that it shall be no excuse that the union with which the Design-Builder has a collective bargaining agreement providing for exclusive referral failed to refer minority employees.) In the event the union referral practice prevents the Design-

Builder from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such Design-Builder shall immediately notify the City.

2.9 Subcontracting

- 2.9.1 The Design-Builder shall use his/her best efforts to solicit bids from and to utilize minority-group and female subcontractors or subcontractors with meaningful minority-group and/or female representation among their employees.
- 2.9.2 The Design-Builder shall use his/her best efforts to assure Subcontractors' compliance with their equal employment opportunity obligations.

2.10 Records and Reports

- 2.10.1 The Design-Builder shall keep such records as are necessary to determine compliance with the Design-Builder's equal employment opportunity obligations. The records kept by the Design-Builder will be designed to indicate:
 - 2.10.1.1 The number of minority and non-minority group members and women employed in each work classification on the Project.
 - 2.10.1.2 The progress and efforts being made in cooperation with unions to increase employment opportunities for minorities and women (applicable only to contractors who rely in whole or in part on unions as a source of their work force).
 - 2.10.1.3 The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minority and female employees.
 - 2.10.1.4 The progress and efforts being made in securing the services of female and minority subcontractors.
- 2.10.2 All records, including payrolls, must be retained for a period of three years following completion of the Contract work and shall be available at reasonable times and places for inspection by authorized representatives of the City and/or the appropriate federal agency.

2.11 Equal Employment Opportunity Clause

Pursuant to City Council Ordinance No. 78-153 8, passed August 9, 1978, all contracts entered into by the City of Houston involving the expenditure of \$10,000 or more, shall incorporate the following Equal Employment Opportunity Clause:

- 2.11.1 The Design-Builder, Subcontractor, vendor, Supplier, or lessee shall not discriminate against any employee or applicant for employment because of race, religion, color, sex, national origin, or age. The Design-Builder, Subcontractor, vendor, Supplier, or lessee shall take affirmative action to ensure that applicants are employed and that employees are treated during employment without regard to their race, religion, color, sex, national origin, or age. Such action will include, but not be limited to, the following: employment; upgrading; demotion or transfer; recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Design-Builder, Subcontractor, vendor, Supplier, or lessee agrees to post in conspicuous places available to employees, and applicants for employment, notices to be provided by the City setting forth the provisions of this Equal Employment Opportunity Clause.
- 2.11.2 The Design-Builder, Subcontractor, vendor, Supplier, or lessee states that all qualified applicants will receive consideration for employment without regard to race, religion, color, sex, national origin, or age.
- 2.11.3 The Design-Builder, Subcontractor, vendor, Supplier, or lessee shall send to each labor union or representatives of workers with which it has a collective bargaining agreement or other contract or understanding, a notice to be provided by the agency contracting officer advising the said labor union or workers' representative of the Design-Builder's and Subcontractor's

commitments under Section 202 of Executive Order No. 11246, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

- 2.11.4 The Design-Builder, Subcontractor, vendor, Supplier, or lessee will comply with all provisions of Executive Order No. 11246 and the rules, regulations, and relevant orders of the Secretary of Labor or other Federal Agency responsible for enforcement of the equal opportunity and affirmative action provisions applicable, and shall likewise furnish all information and reports required by the Mayor and/or Design-Builder Compliance Officers for purposes of investigation to ascertain and effect compliance with this program.
- 2.11.5 The Design-Builder, Subcontractor, vendor, Supplier, or lessee shall furnish all information and reports required by Executive Order No. 11246, and by the rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and shall permit access to all books, records, and accounts by the appropriate City and Federal officials for purposes of investigation to ascertain compliance with such rules, regulations, and orders. Compliance reports filed at such times as directed shall contain information as to the employment practice policies, program, and work force statistics of the Design-Builder, Subcontractor, vendor, Supplier, or lessee.
- 2.11.6 In the event of a Design-Builder's, Subcontractor's, vendor's, Supplier's, or lessee's non-compliance with the non-discrimination clause of this Contract or with any of such rules, regulations, or orders, this Contract may be canceled, terminated, or suspended in whole or in part, and the Design-Builder, Subcontractor, vendor, Supplier, or lessee may be declared ineligible for further City contracts in accordance with procedures provided in Executive Order No. 11246, and such other sanctions may be imposed and remedies invoked as provided in said Executive Order, or by rule, regulation, or order of the Secretary of Labor, or as may otherwise be provided by law.
- 2.11.7 The Design-Builder shall include the provisions of paragraphs 1 through 8 of this Equal Employment Opportunity Clause in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to Section 204 of Executive Order No. 11246 of September 24, 1965 so that such provisions will be binding upon each Subcontractor or vendor. The Design-Builder shall take such action with respect to any subcontractor or purchase order as the contracting agency may direct as a means of enforcing such provisions, including sanctions for noncompliance; provided, however, that in the event the Design-Builder becomes involved in, or is threatened with litigation with a Subcontractor or vendor as a result of such direction by the contracting agency, the Design-Builder may request the United States to enter into such litigation to protect the interests of the United States.
- 2.11.8 The Design-Builder shall file and shall cause each of his Subcontractors, if any, to file compliance reports with the City in the form and to the extent as may be prescribed by the Mayor's Office of Business Opportunity. Compliance reports filed at such times as directed shall contain information as to the practices, policies, programs, employment policies, and employment statistics of the Design-Builder and each Subcontractor.

Article 3 – Notice of Requirement for Affirmative Action to Ensure Equal Employment Opportunity

(Executive Order 11246)

3.1 General

The Offeror's or Design-Builder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Opportunity Construction Contract Specifications" set forth herein.

3.2 Goals

The goals and timetables for minority and female participation, expressed in percentage terms for the Design-Builder's aggregate work force in each trade on all construction work in the covered area, are as follows:

Timetables

Goals for Minority

Goals for Female

Participation for
Each Trade 26.2% - 27.3%

Participation for
Each Trade 6.9%

These goals are applicable to all the Design-Builder's construction work (whether or not it is Federal or Federally-assisted) performed in the covered area.

The Design-Builder's compliance with the Executive Order and the regulations in 41 CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.3(a), and its efforts to meet the goals established for the geographical area where the Contract resulting from this solicitation is to be performed. The hours of minority and female employment and training must be substantially uniform throughout the length of the Contract, and in each trade, and the Design-Builder shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Design-Builder to Design-Builder or from project to project for the sole purpose of meeting the Design-Builder's goals shall be a violation of the Contract, the Executive Order, and regulations in 41 CFR part 60-4. Compliance with the goals will be measured against the total work hours performed.

3.3 Notification

The Design-Builder shall provide written notification to the Director of the Office of Federal Contract Compliance Programs within 10 working days of award of any construction subcontract in excess of \$10,000 at any tier for construction work under the Contract resulting from this solicitation. The notification shall list the name, address, and telephone number of the Subcontractor; employer identification number; estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the Contract is to be performed.

3.4 Area

As used in this Notice, and in the Contract resulting from this solicitation, the "covered area" is The Houston, Texas Standard Metropolitan Statistical Area.

Article 4 – Standard Federal Equal Employment Opportunity Construction Contract Specification

(Executive Order 11246)

4.1 Definitions: As used in these specifications:

- 4.1.1 "Covered area" means the geographical area described in the solicitation from which this Contract resulted;
- 4.1.2 "Director" means Director, Office of Federal Contract Compliance Programs, United States Department of Labor, or any person to whom the Director delegates authority;
- 4.1.3 "Employer identification number" means the Federal Social Security number used on the Employer's Quarterly Federal Tax Return, U. S. Treasury Department Form 941.
- 4.1.4 "Minority" includes:
 - 4.1.4.1 Black (all persons having origins in any of the Black African racial groups not of Hispanic origin);
 - 4.1.4.2 Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin regardless of race);
 - 4.1.4.3 Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands); and
 - 4.1.4.4 American Indian or Alaskan Native (all persons having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participation or community identification).

4.2 Subcontracting Notice

Whenever the Design-Builder, or any Subcontractor at any tier, subcontracts a portion of the work involving any construction trade, it shall physically include in each subcontract in excess of \$10,000 the provisions of these specifications and the Notice which contains the applicable goals for minority and female participation and which is set forth in the solicitations from which this Contract resulted.

4.3 Participation in Plan

If the Design-Builder is participating (pursuant to 41 CFR 60-4.5) in a Hometown Plan approved by the U.S. Department of Labor in the covered area either individually or through an association, its affirmative action obligations on all work in the Plan area (including goals and timetables) shall be in accordance with that Plan for those trades which have unions participating in the Plan. Design-Builders must be able to demonstrate their participation in and compliance with the provisions of any such Hometown Plan. Each Design-Builder or Subcontractor participating in an approved Plan is individually required to comply with its obligations under the EEO clause, and to make a good faith effort to achieve each goal under the Plan in each trade in which it has employees. The overall good faith performance by other Design-Builders or Subcontractors toward a goal in an approved Plan does not excuse any covered Design-Builder's or Subcontractor's failure to take good efforts to achieve the Plan goals and timetables.

4.4 Specific Affirmative Action Standards

The Design-Builder shall implement the specific affirmative action standards provided in Paragraphs 7a through p of these specifications. The goals set forth in the solicitation from which this Contract resulted are expressed as percentages of the total hours of employment and training of minority and female utilization the Design-Builder should reasonably be able to achieve in each construction trade in which it has employees in the covered area. The Design-Builder is expected to make substantially uniform progress toward its goals in each craft during the period specified.

4.5 Contractor's Obligations

Neither the provisions of any collective bargaining agreement, nor the failure by a union with whom the Design-Builder has a collective bargaining agreement to refer either minorities or women, shall excuse the Design-Builder's obligations under these specifications, Executive Order 11246, or the regulations promulgated pursuant thereto.

4.6 Apprentices and Trainees

In order for the non-working training hours of apprentices and trainees to be counted in meeting the goals, such apprentices and trainees must be employed by the Design-Builder during the training period, and the Design-Builder must have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees must be trained pursuant to training programs approved by the U. S. Department of Labor.

4.7 Affirmative Action Steps.

The Design-Builder shall take specific affirmative actions to ensure equal employment opportunity. The evaluation of the Design-Builder's compliance with these specifications shall be based upon its effort to achieve maximum results from its actions. The Design-Builder shall document these efforts fully, and shall implement affirmative action steps at least as extensive as the following:

- 4.7.1 Ensure and maintain a working environment free of harassment, intimidation, and coercion at all sites, and in all facilities at which Design-Builder's employees are assigned to work. The Design-Builder, where possible, shall assign two or more women to each construction project. The Design-Builder shall specifically ensure that all foremen, superintendents, and other on-site supervisory personnel are aware of and carry out the Design-Builder's obligation to maintain such a working environment, with

- specific attention to minority or female individuals working at such sites or in such facilities.
- 4.7.2 Establish and maintain a current list of minority and female recruitment sources, provide written notification to minority and female recruitment sources and to community organizations when the Design-Builder or its unions have employment opportunities available, and maintain a record of the organizations' responses.
- 4.7.3 Maintain a current file of the names, addresses, and telephone numbers of each minority and female off-the-street applicant and minority or female referral from a union, a recruitment source, or community organization and of what action was taken with respect to each such individual. If such individual was sent to the union hiring hall for referral and was not referred back to the Design-Builder by the union or, if referred, not employed by the Design-Builder, this shall be documented in the file with the reason therefor, along with whatever additional actions the Design-Builder may have taken.
- 4.7.4 Provide immediate written notification to the Director when the union or unions with which the Design-Builder has a collective bargaining agreement has not referred to the Design-Builder a minority person or woman sent by the Design-Builder, or when the Design-Builder has other information that the union referral process has impeded the Design-Builder's efforts to meet its obligations.
- 4.7.5 Develop on-the-job training opportunities and/or participate in training programs for the area which expressly include minorities and women, including upgrading programs and apprenticeship and trainee programs relevant to the Design-Builder's employment needs, especially those programs funded or approved by the Department of Labor. The Design-Builder shall provide notice of these programs to the sources compiled under 7b above.
- 4.7.6 Disseminate the Design-Builder's EEO policy: by providing notice of the policy to unions and training programs and requesting their cooperation in assisting the Design-Builder in meeting its EEO obligations; by including it in any policy manual and collective bargaining agreement; by publicizing it in the company newspaper, annual report, etc.; by specific review of the policy with all management personnel and with all minority and female employees at least once a year; and by posting the company EEO policy on bulletin boards accessible to all employees at each location where construction work is performed.
- 4.7.7 Review, at least annually, the company's EEO policy and affirmative action obligations under these specifications with all employees having any responsibility for hiring, assignment, layoff, termination, or other employment decisions, including specific review of these items with on-site supervisory personnel such as superintendents, general foremen, etc., prior to the initiation of construction work at any job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and disposition of the subject matter.
- 4.7.8 Disseminate the Design-Builder's EEO policy externally by including it in any advertising in the news media, specifically including minority and female news media, and providing written notification to and discussing the Design-Builder's EEO policy with other contractors and subcontractors with whom the Design-Builder does or anticipates doing business.
- 4.7.9 Direct its recruitment efforts, both oral and written, to minority, female and community organizations, to schools with minority and female students, and to minority and female recruitment and training organizations serving the Design-Builder's recruitment area and employment needs. Not later than one month prior to the date for the acceptance of applications for apprenticeship or other training by any recruitment source, the Design-Builder shall send written notification to organizations such as the above, describing the openings, screening procedures, and tests to be used in the selection process.

- 4.7.10 Encourage present minority and female employees to recruit other minority persons and women and, where reasonable, provide after school, summer, and vacation employment to minority and female youth both on the site and in other areas of a Design-Builder's work force.
- 4.7.11 Validate all tests and other selection requirements where there is an obligation to do so under 41 CFR Part 60-3.
- 4.7.12 Conduct, at least annually, an inventory and evaluation at least of all minority and female personnel for promotional opportunities and encourage these employees to seek or to prepare, through appropriate training, etc., for such opportunities.
- 4.7.13 Ensure that seniority practices, job classifications, work assignments, and other personnel practices do not have a discriminatory effect by continually monitoring all personnel and employment-related activities to ensure that the EEO policy and the Design-Builder's obligations under these specifications are being carried out.
- 4.7.14 Ensure that all facilities and company activities are non-segregated except that separate or single-user toilet and necessary changing facilities shall be provided to assure privacy between the sexes.
- 4.7.15 Document and maintain a record of all solicitations of offers for subcontracts from minority and female construction contractors and suppliers, including circulation of solicitations to minority and female contractor associations and other business associations.
- 4.7.16 Conduct a review, at least annually, of all supervisors' adherence to and performance under the Design-Builder's EEO policies and affirmative action obligations.

4.8 Voluntary Associations

Contractors are encouraged to participate in voluntary associations which assist in fulfilling one or more of their affirmative action obligations (7a through p). The efforts of a contractor association, joint contractor union, contractor-community, or other similar group of which the Design-Builder is a member and participant, may be asserted as fulfilling any one or more of its obligations under 7a through p of these Specifications provided that the Design-Builder actively participates in the group, makes every effort to assure that the group has a positive impact on the employment of minorities and women in the industry, ensures that the concrete benefits of the program are reflected in the Design-Builder's minority and female work force participation, makes a good faith effort to meet its individual goals and timetables, and can provide access to documentation which demonstrates the effectiveness of actions taken on behalf of the Design-Builder. The obligation to comply, however, is the Design-Builder's and failure of such a group to fulfill an obligation shall not be a defense for the Design-Builder's noncompliance.

4.9 Minority Goals

A single goal for minorities and a separate single goal for women have been established. The Design-Builder, however, is required to provide equal employment opportunity and to take affirmative action for all minority groups, both male and female, and all women, both minority and non-minority. Consequently, the Design-Builder may be in violation of the Executive Order if a particular group is employed in a substantially disparate manner (for example, even though the Design-Builder has achieved its goals for women generally, the Design-Builder may be in violation of the Executive Order if a specific minority group of women is under-utilized).

4.10 Goals and Timetables

The Design-Builder shall not use the goals and timetables or affirmative action standards to discriminate against any person because of race, color, religion, sex, or national origin.

4.11 Debarred Person or Firm

The Design-Builder shall not enter into any subcontract with any person or firm debarred from Government contracts pursuant to Executive Order 11246.

4.12 Sanctions and Penalties

The Design-Builder shall carry out such sanctions and penalties for violation of these specifications and of the Equal Opportunity Clause, including suspension, termination, and cancellation of existing subcontracts as may be imposed or ordered pursuant to Executive Order 11246, as amended, and its implementing regulations, by the Office of Federal Contract Compliance Programs. Any contractor who fails to carry out such sanctions and penalties shall be in violation of these specifications and Executive Order 11246, as amended.

4.13 Implementation of Affirmative Action Steps

The Design-Builder, in fulfilling its obligations under these specifications, shall implement specific affirmative action steps, at least as extensive as those standards prescribed in Paragraph 7 of these Specifications, so as to achieve maximum results from its efforts to ensure equal employment opportunity. If the Design-Builder fails to comply with the requirements of the Executive Order, the implementing regulations, or these specifications, the Director shall proceed in accordance with 41 CFR 60-4.B.

4.14 Record Keeping

The Design-Builder shall designate a responsible official to monitor all employment- related activity to ensure that the company EEO policy is being carried out, to submit reports relating to the provisions hereof as may be required by the Government, and to keep records. Records shall at least include for each employee the name, address, telephone number, construction trade, union affiliation, if any, employee identification number when assigned, social security number, race, sex, status (e.g., mechanic, apprentice, trainee, helper, or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay, and locations at which the work was performed. Records shall be maintained in an easily-understandable and retrievable form; however, to the degree that existing records satisfy this requirement, contractors shall not be required to maintain separate records.

4.15 Limitations

Nothing herein provided shall be construed as a limitation upon the application of other laws which establish different standards of compliance or upon the application of requirements for the hiring of local or other area residents (e.g., those under the Public Works Employment Act of 1977 and the Community Development Block Grant Program).

Article 5 – Description of Job Categories

5.1 Officials, Managers and Administrators

Occupations requiring administrative personnel who set board policies, exercise overall responsibility for the execution of these policies, or provide specialized consultation on a regional, district, area basis, or direct individual departments or special phases of a firm's operations.

Includes: Officials, executives, middle management, plant managers, department managers, superintendents, salaried foremen who are members of management, purchasing agents, buyers, bureau chiefs, directors, deputy directors, wardens, examiners, sheriffs, police and fire chiefs, and kindred workers.

5.2 Professionals

Occupations which require specialized and theoretical knowledge which is usually acquired through college or experience of such kind and amount as to provide a comparable background.

Includes: Accountants, auditors, airplane pilots and navigators, architects, artists, chemists, designers, dieticians, editors, engineers, lawyers, librarians, mathematicians, natural scientists, registered professional nurses, personnel and labor relations workers, physical scientists, teachers, social workers, doctors, psychologists, economists, systems analysts, employment and vocational rehabilitation counselors, instructors, police and fire captains and lieutenants, and kindred workers.

5.3 Paraprofessionals

Occupations in which workers perform some of the duties of a professional or technician in a supportive role, which usually requires less formal training and/or experience normally required for professional or technical status. Such positions may fall within an identified pattern of a "New Careers" concept.

Includes: Library assistants, medical aides, child support workers, police auxiliary, welfare service aides, recreation assistants, home-makers aides, home health aides, and kindred workers.

5.4 Technicians

Occupations requiring a combination of basic scientific knowledge and manual skill which can be obtained through about two (2) years of post-high school education, such as is offered in many technical institutes and junior colleges, or through equivalent on-the-job training.

Includes: Computer programmers and operators, draftsmen, engineering aides, junior engineers, mathematical aides, licensed practical or vocational nurses, photographers, radio operators, scientific assistants, surveyors, technical illustrators, technicians (medical, dental, electronics, physical sciences), police and fire sergeants, and kindred workers.

5.5 Protective Service Workers

Occupations in which workers are entrusted with public safety, security, and protection from destructive forces. Includes: Police patrol officers, fire fighters, guards, deputy sheriffs, bailiffs, correctional officers, detectives, marshals, harbor patrol officers, and kindred workers.

5.6 Sales Workers

Occupations engaging wholly or primarily in direct selling.

Includes: Advertising agents and salespersons, insurance agents and brokers, real estate agents and brokers, stock and bond salespersons, demonstrators, salespersons and sales clerks, grocery clerks, cashiers, and kindred workers.

5.7 Office and Clerical

Occupations in which workers are responsible for internal and external communications, recording and retrieval of data and/or information and other paper work required in an office predominantly non-manual, though some manual work not directly involved with altering or transporting the products is included.

Includes: Bookkeepers, cashiers, collectors (bills and accounts), messengers and office helpers, office machine operators, shipping and receiving clerks, stenographers, typists and secretaries, telegraph and telephone operators, court transcribers, hearing reporters, statistical clerks, dispatchers, license distributors, payroll clerks, and kindred workers.

5.8 Skilled Craft Workers

Occupations in which workers perform jobs which require special manual skill through on-the-job training and experience, or through apprenticeship or other formal training programs. These workers exercise considerable independent judgment and usually receive an extensive period of training.

Includes: The building trades, hourly paid foremen and lead-men who are not members of management, mechanics and repairmen, skilled machining occupations, compositors and typesetters, electricians, engravers, job setters (metal), motion picture projectionists, pattern and model makers, stationary engineers, tailors, heavy equipment operators, carpenters, and kindred workers.

5.9 Operatives (semi-skilled)

Workers who operate machine or processing equipment or perform other factory- type duties of intermediate skill level which can be mastered in a few weeks and require only limited training.

Includes: Apprentices (auto mechanics), plumbers, bricklayers, carpenters, electricians, mechanics, building trades, metal workers, machinists, printing trades, operatives, attendants (auto service and parking), blasters, chauffeurs, deliverymen, dressmakers and seamstresses (except factory), dryers, furnacemen, heaters (metal), laundry and dry cleaning operatives, milliners, miners, motormen, oilers, greasers, etc. (except auto), painters (except construction and maintenance), photographic process workers, stationary firemen, truck and tractor drivers, weavers (textile), welders and flame cutters, and kindred workers.

5.10 Laborers (unskilled)

Workers in manual occupations which generally require no special training. These workers perform elementary duties that may be learned in a few days and require the application of little or no independent judgment.

Includes: Garage workers, car washers and greasers, gardeners (except farm) and groundskeepers, longshoremen and stevedores, lumbermen, craftsmen, and wood choppers, laborers performing lifting, digging, mixing, loading, and pulling operations, and kindred workers.

5.11 Service/Maintenance Workers

Occupations in which workers perform duties which result in or contribute to the comfort, convenience, hygiene, or safety for the general public, or which contribute to the upkeep and care of buildings, facilities or grounds, or public property. Workers in this group may operate machinery.

Includes: Chauffeurs, laundry and dry-cleaning operatives, truck drivers, trash collectors, custodial personnel, gardeners and groundskeepers, construction laborers, attendants (hospital and other institutions), professional and personal service, counter and fountain workers, elevator operators, firemen and fire protection, guards, watchmen and doorkeepers, stewards, porters, waiters, and kindred workers.

Attachment 4 – Certification by Proposed Subcontractor Regarding Equal Employment Opportunity

00805-26
May 1, 2012

HOUSTON WATERWORKS TEAM

Name of Prime Contractor

12630 Water Works Way, Humble TX 77396

Address

S-000065-0002-4 4600013557

Project WBS & OA Number

GENERAL

In accordance with Executive Order 11246 (30 F.R.12319-25), the implementing rules and regulations thereof, and orders of the Secretary of Labor, a certification regarding Equal Opportunity is required of bidders or prospective contractors and their proposed subcontractors prior to the award of contracts or subcontracts.

SUBCONTRACTORS CERTIFICATION

Subcontractor's Name

Contact email Address

Address:

IRS Employer Identification Number

Job Description:

(Work performed by your company for this project)

1. Participation in a previous contract or subcontract
- a. Subcontractor has participated in a previous contract or subcontract subject to the Equal Opportunity Clause ☐ YES ☐ NO
- b. Compliance reports were required to be filed in connection with such contract or subcontract ☐ YES ☐ NO
- c. Subcontractor has filed all compliance reports required by Executive Order 10925, 11114, 11246, or by regulations of the Equal Opportunity Commission issued pursuant to the Title VII of the Civil Rights Act of 1964, ☐ YES ☐ NO
- d. If answer to item c is "No", please explain in detail on reverse side of this certification.

2. Dollar amount of proposed subcontract

3. Anticipated performance period in days:

4. Expected total number of employees to perform the proposed subcontract:

5. Non-Segregated facilities

a. Notice to prospective federally-assisted construction contractors

- (1) A Certification of Non-Segregated Facilities, as required by the May 9, 1967, order (32 F.R. 7439, May 19, 1967) on Elimination of Segregated Facilities, by the Secretary of Labor, must be submitted to the Contractor prior to the award of a subcontract exceeding \$10,000 which is not exempt from the provisions of the Equal Opportunity Clause.
- (2) Contractors receiving subcontract awards exceeding \$10,000 which are not exempt from the provisions of the Equal Opportunity Clause will be required to provide for the forwarding of this notice to prospective subcontractors for supplies and construction contracts where the subcontracts exceed \$10,000 and are not exempt from the provisions of the Equal Opportunity clause.

b. Certification of non-segregated facilities

The federally-assisted construction contractor certified that he/she does not maintain or provide any segregated facilities at any of his/her establishments, and does not permit employees to perform their services at any location, under his/her control, where segregated facilities are maintained. The federally-assisted construction Contractor certifies further that he/she will not maintain or provide any segregated facilities at any of his/her establishments, and will not permit employees to perform their services at any location, under his/her control, where segregated facilities are maintained. The federally-assisted construction Contractor agrees that a breach of this certification is a violation of the Equal Opportunity Clause in this Contract. As used in this certification, the term "segregated facilities" means any waiting rooms, work areas, restrooms and washrooms, restaurants, and other eating areas, time clocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees which are segregated by explicit directive or are in fact segregated on the basis of race, creed, color, or national origin because of habit, local custom, or otherwise. The federally-assisted construction Contractor agrees that (except where he/she has obtained identical certifications from proposed Subcontractors for specific time periods) he/she will obtain identical certifications in duplicate from proposed Subcontractors prior to the award of subcontracts exceeding \$10,000 which are not exempt from the provisions of the Equal Opportunity Clause, and that he/she will retain the duplicate of such certifications in his/her files. The Contractor will include the original in his/her Bid Package.

6. Race or ethnic group designation of bidder. Enter race or ethnic group in Appropriate box.

☐ White ☐ Black ☐ Hispanic
☐ Pacific Islander, Asian ☐ American Indian, Aleut.

GENDER:

☐ Male ☐ Female

REMARKS:

Certification – The information above is true and complete to the best of my knowledge and belief.

Company Officer (Please Type)

Signature Date

NOTE: The penalty for making false statements in offers is prescribed in 18 U.S.C. 1001.

Attachment 5 – City of Houston – Company Wide EEO Report

1. Check One <input type="checkbox"/> Prime <input type="checkbox"/> Subcontractor		2. Name and Address										3. FEID No.			
4. County												5. TN CSJ DOG Project # (If Applicable)			
6. Contractor's Beginning Work Date on Project					7. City of Houston Contract No.					8. This report is based on Pay Period ending MM/DD/YYYY					

9. TEXAS CONSTRUCTION EMPLOYMENT																		
TABLE 1																TABLE B		
Job Categories	TOTAL EMPLOYEES		TOTAL MINORITIES		WHITE (Not of Hispanic)		BLACK (Not of Hispanic Origin)		AMERICAN INDIAN or ALASKAN		ASIAN		NATIVE HAWAIIAN or OTHER		TWO or MORE RACES		On-the-job Training (OJT)	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F		
OFFICIALS																		
MANAGERS	0	0	0	0														
SUPERVISORS	0	0	0	0														
FOREMEN/WOMEN	0	0	0	0														
ADMIN SUPPORT	0	0	0	0														
EQUIPMENT OPERATORS	0	0	0	0														
MECHANICS	0	0	0	0														
TRUCK DRIVERS	0	0	0	0														
IRONWORKERS	0	0	0	0														
CARPENTERS	0	0	0	0														
CEMENT MASONS	0	0	0	0														
ELECTRICIANS	0	0	0	0														
PIPEFITTERS																		
PLUMBERS	0	0	0	0														
PAINTERS	0	0	0	0														
LABORERS, SEMI SKILLED	0	0	0	0														
LABORERS, UNSKILLED	0	0	0	0														
TOTALS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
OJT Totals																		
TABLE C																M	F	
On the job trainee																	0	0

10. If any employees reported in Table A are Apprentices, Name of the Program, Job Category, Count, Race & Sex

11. Summarize all hires for the entire active month by job category, race, sex (Use additional sheet if Needed)

	Printed Name (First/Last)	Email address	Phone	Signature	Date
12. Preparer					
13. Reviewer					

Attachment 6 – Certification by Proposed Material Suppliers, Lessors, and Professional Service Providers Regarding Equal Reemployment Opportunity

Company Name:		\$
	(Supplier, Lessor, Professional Service Provider)	(Amount of Contract)
Company Address:		
Company Telephone Number		Fax:
E-mail Address:		
Web Page/URL Address		
Goods to be Provided to this contract:		
Company Tax Identification Number:		
Project No.: (WBS/CIP/AIP/File No.)	S-00065-0002-4 4600013557	
Project Name (Legal Project Name)	Northeast Water Purification Plant Expansion (NEWPP)	

In accordance with the City of Houston Ordinance 78-1538. Supplier/Lessor/Professional Service Provider represents to be an equal opportunity employer and agrees to abide by the terms of the Ordinance. This certification is required of all Suppliers/Lessors/Professional Service Providers (herin Supplier) with contracts in the amount of \$10,000.00 or more.

- | | | | | |
|--------------------------|-----|--------------------------|----|--|
| <input type="checkbox"/> | Yes | <input type="checkbox"/> | No | Supplier agrees not to discriminate against any employee or applicant for employment because of race, religion, color, sex, national origin, or age |
| <input type="checkbox"/> | Yes | <input type="checkbox"/> | No | Supplier agrees that all qualified applicants will receive consideration for employment without regard to race, religion, color, sex, national origin, or age |
| <input type="checkbox"/> | Yes | <input type="checkbox"/> | No | Supplier will comply with all provisions of Executive Order No. 11246 and rules, regulations and applicable orders of the Department of Labor or other Federal Agency responsible for enforcement of applicable opportunity and affirmative action provisions and will likewise furnish all information and reports required by the Mayor or Contract Compliance Officers for the purpose of investigation to ascertain and effect compliance with the City of Houston's Office of Affirmative Action and Contract Compliance. |
| <input type="checkbox"/> | Yes | <input type="checkbox"/> | No | The Supplier shall file and cause their sub-tier contractors to file compliance reports with the City in the form and to the extent as may be prescribed by the Mayor or Contract Compliance Officers. Compliance reports filed at such times as directed shall contain information including, but not limited to, the practices, policies, programs, and employment policies. |

I hereby certify that the above information is true and correct.

COMPANY OFFICER (Signature)	Date
NAME AND TITLE (Print or Type)	

END OF DOCUMENT

COH Flowdown – Exhibit L - MWSBE Program Terms
REQUIREMENTS FOR
THE CITY OF HOUSTON PROGRAM FOR
MINORITY, WOMEN, AND SMALL BUSINESS ENTERPRISES AND PERSONS WITH DISABILITIES
ENTERPRISES (PDBE)
CONSTRUCTION CONTRACTS

Article 1 - General

1.1 City Authorities

- 1.1.1 The "OBO Director" is the City of Houston's Office of Business Opportunity Director, or his or her designee.
City of Houston
611 Walker Street, 7th Floor
Houston, Texas 77002
- 1.1.2 The "Contracting Department" for this Project is the City of Houston Department specified in the Contract Documents.
- 1.1.3 The "Project Director" is for this Project specified in the Contract Documents.

Article 2 – Reoccurring reports that must be submitted during the course of the Contracts:

2.1 MWSBE Monthly Report Process

The Design-Builder shall complete the MWSBE Monthly Utilization Report in the Contract Compliance and Monitoring System (available at <https://houston.mwdbbe.com/>).

2.2 Instructions

The Design-Builder shall comply with further, applicable instructions regarding reporting and compliance as provided in Sections III.E and III.I below.

Article 3 – Business Enterprise Program Requirements:

3.1 Purpose

This Document facilitates implementation of City of Houston, Tex. Code of Ordinances Chapter 15, Article V, § 15-81 et seq., relating to MWSBE contract participation, and Code of Ordinances Chapter 15, Article VI, § 15-90 et seq., relating to PDBE contract participation (collectively, the "Business Enterprise Program or "MWSBE"). City of Houston, Tex. Ordinance 2013-0428, May 8, 2013.

3.2 Policy

It is the policy of the City to encourage the full participation of Minority and Women-owned Business Enterprises, Small Business Enterprises, and Persons with Disabilities Business Enterprises in all phases of its procurement activities and to afford them a full and fair opportunity to compete for City contracts at all levels.

3.3 Policy Elements

- 3.3.1 The Design-Builder agrees to ensure that MWSBE firms have a full and fair opportunity to participate in the performance of City contracts. In this regard the Design-Builder shall make all reasonable Good Faith Efforts to meet the Contract Goals for this Contract.
- 3.3.2 The Design-Builder and any Subcontractor shall not discriminate on the basis of race, color, religion, national origin, or sex in the performance of City contracts.
- 3.3.3 Design-Builder's performance in meeting the Participation Plan Percentage will be monitored during the construction phase of the Contract by the OBO Director and Contracting Department.

3.4 Percentage Goals

The MWSBE goals and PDBE goals, if any, for the Work are specified in the Contract Documents.

3.5 Design-Builder Responsibilities

- 3.5.1 Prior to Execution of Amendments: The Design-Builder shall submit MWSBE documents in accordance with the requirements of the Contract Documents. The Design-Builder shall submit and update Document.
 - 3.5.1.1 In accordance with the Code of Ordinances and the OBO Good Faith Efforts Policy (Attachment A), the Department shall approve the Design-Builder's MWSBE Participation Plan (Attachment C, "Design-Builder's Plan" or "Plan") within 3 business days of receipt of a draft Early Work Package Amendment or GMP Amendment only if the Department representative determines that Design-Builder's Plan meets the Contract Goal and is administratively complete.
 - 3.5.1.2 If the Department cannot approve the Design-Builder's Plan, it shall forward the Plan to the OBO Director, who shall review the Design-Builder's Plan, and if applicable, the Design-Builder's Record of Good Faith Efforts (Attachment D) and Pre-Award Deviation Request (Attachment E) and determine whether the Design-Builder has made Good Faith Efforts to meet the Contract Goals within 10 business days of the Bid Opening.
 - 3.5.1.3 If the OBO Director determines that the Design-Builder has failed to provide a valid Plan or make Good Faith Efforts or if the Design-Builder fails to provide documents and associated information required by the Contract Documents or reasonably requested in writing by the OBO Director, the OBO Director may institute sanctions against the Design-Builder.
 - 3.5.1.4 If the OBO Director determines that the Design-Builder has made Good Faith Efforts, the Director may approve the Design-Builder's Contract Goal Deviation request. Thereafter, the Design-Builder shall be bound by the Plan, as approved or modified by the OBO Director.
 - 3.5.1.5 The Design-Builder shall:
 - a ensure that all MWSBE firms listed in the Plan are certified by the Office of Business Opportunity prior to bid date. Qualified, non-certified firms may obtain priority consideration for certification if no more than two firms are certified with the same capability as the non-certified firm.
 - b execute written contracts with all certified Subcontractors and Suppliers. All such contracts must be executed and sent to the OBO Director and Contracting Department within 30 days after the date of the Notice to Proceed and must include provisions set forth in Articles 3 and 5 of the General Conditions.

- c designate an MWSBE liaison officer who will administer the Design-Builder's MWSBE program and who shall document and maintain records of Good Faith Efforts to subcontract with MWSBE Subcontractors and Suppliers.

3.5.2 After Amendments:

- 3.5.2.1 The Design-Builder shall submit MWSBE Monthly Utilization Reports, requested in Article II above.
- 3.5.2.2 The Design-Builder shall complete and submit to the OBO Director a Post-Award Deviation Request-Documents 00572 ("Post-Award Deviation Request") if the Design-Builder reasonably believes that it will not achieve the Business Enterprise Program Participation Plan Percentage documented in the Plan. The Design-Builder shall also submit to the OBO Director, with a Copy to the Contracting Department, a Record of Post-Award Good Faith Efforts (Document 00571) for each Certified Firm that the Design-Builder does not use in accordance with the Approved Plan before the Design-Builder uses another firm to perform the work.
- 3.5.2.3 The Design-Builder shall conform to the Plan unless the OBO Director grants a Post-Award Deviation Request. The OBO Director shall approve or reject a Deviation Request within 5 business days of receipt of the Deviation Request.
- 3.5.2.4 The OBO Director shall grant a Post-Award Deviation Request if
 - a ensure that all MWSBE firms listed in the Plan are certified by the Office of Business Opportunity prior to bid date. Qualified, non-certified firms may obtain priority consideration for certification if no more than two firms are certified with the same capability as the non-certified firm.
 - b execute written contracts with all certified Subcontractors and Suppliers. All such contracts must be executed and sent to the OBO Director and Contracting Department within 30 days after the date of the Notice to Proceed and must include provisions set forth in Articles 3 and 5 of the General Conditions.
 - c designate an MWSBE liaison officer who will administer the Design-Builder's MWSBE program and who shall document and maintain records of Good Faith Efforts to subcontract with MWSBE Subcontractors and Suppliers.
- 3.5.2.5 After the Date of Substantial Completion, the OBO Director shall evaluate the Design-Builder's Good Faith Efforts towards meeting the Plan, as it may be amended.
- 3.5.2.6 If the Design-Builder fails to conform to the Plan and fails to submit a Post-Award Deviation Request or provide documents and associated information required by the Good Faith Efforts Policy or reasonably requested in writing by the OBO Director, the OBO Director may impose sanctions in accordance with Article VI of this Exhibit L.

3.6 Eligibility of MWSBE Firms for Subcontracting

- 3.6.1 To ensure that the City's Business Enterprise Program benefits only those firms that are owned and controlled by a minority person(s), a woman (women), a person(s) with a disability, or a small business enterprise, the Office of Business Opportunity will certify the eligibility of MWSBE and PDBE Contractors, Subcontractors, and Suppliers. Contact the Office of Business Opportunity Certification Section at 832-393-0600 for information regarding certification.

- 3.6.2 The Office of Business Opportunity maintains a Certified Minority, Women and Small Business Enterprises and Disabilities Business Enterprises Directory on the City's website. This Directory also lists federally-designated Disadvantaged Business Enterprises (DBEs).

NOTE: MWSBE firms, even if certified by another agency, may not qualify for Contract Goals unless certified by the Office of Business Opportunity prior to acceptance of the Participation Plan.

3.7 Determination of MWSBE Participation

MWSBE participation shall be counted toward meeting the Contract Goals in response to the following:

- 3.7.1 Once a firm is certified as a MWSBE firm, the total dollar value of the subcontract awarded to the MWSBE firm is counted toward the Contract Goals (See Sections 111.G.4 and 111.G.5 below). Safety and Participation goals do not count as a single goal concerning MWSBE/DBE requirements.
- 3.7.2 When the Design-Builder or Subcontractor is in a joint venture with one or more MWSBE firms, the OBO Director shall determine the percent of participation resulting from such joint venture to be counted toward the Contract Goals.
- 3.7.3 Design-Builder may count toward its Contract Goals only those MWSBE Subcontractors/Suppliers performing a Commercially Useful Function.
- 3.7.3.1 **COMMERCIALLY USEFUL FUNCTION** means a discrete task or group of tasks, the responsibility for performance of which shall be discharged by the MWSBE firm by using its own forces or by actively supervising on-site the execution of the tasks by another entity for whose work the MWSBE firm is responsible. In determining whether a certified firm is performing a commercially useful function, factors including but not limited to the following shall be considered: (1) whether the firm has the skill and expertise to perform the work for which it is being utilized and possesses all necessary licenses; (2) whether the firm is in the business of performing, managing, or supervising the work for which it has been certified and is being utilized; and (3) whether it is performing a real and actual service that is a distinct and verifiable element of the work called for in a contract. Without limiting the generality of the foregoing, a MWSBE will not be considered to be performing a commercially useful function, if it subcontracts to non-MWSBE firms or to other MWSBE firms, more than 50 percent of a contract being counted toward the applicable Contract Goals, unless such subcontracting in excess of 50 percent has been expressly approved by the OBO Director in a Goal or Plan Deviation Request (Attachment D or Attachment G) (either pre-bid or post award).
- 3.7.3.2 The OBO Director shall approve a Plan Deviation Request if the Design-Builder demonstrates that the industry standard for the type of work involved is to subcontract over 50 percent of the work.
- 3.7.4 A MWSBE firm cannot subcontract more than 50 percent of the work for which it is responsible to perform unless the OBO Director grants a Deviation Approval.
- 3.7.5 The Design-Builder may count 100 percent of MWSBE Manufacturer Supplier's participation and 60 percent of MWSBE Non-Manufacturer Supplier's participation toward its Contract Goals. Such MWSBE Supplier contracts shall not exceed 50 percent of contract's goals.
- 3.7.6 The OBO Policy and Procedures Manual, as amended, shall apply to the Contract for other determinations regarding counting MWSBE participation not explicitly provided for in the Contract.

3.8 Design-Builder Compliance

To ensure compliance with MWSBE requirements, the OBO Director and Contracting Department will monitor Design-Builder's efforts regarding MWSBE Subcontractors/Suppliers during the performance of this Contract. This may be accomplished through the following: job site visits, reviewing of records and reports, and interviews of randomly selected personnel.

3.9 Records and Reports

3.9.1 In accordance with II.A of this Document, the Design-Builder shall submit an initial report outlining Subcontractor/Supplier participation (Attachment B), 40 days after the Countersignature date, and on or before the 15th day of each month thereafter until all MWSBE subcontracting or material supply activity is completed. Each report shall cover the preceding month's activity. The Design-Builder shall use the MWSBE Contract Compliance and Monitoring System (B2G Now) to meet this requirement.

3.9.2 Design-Builder shall maintain the following records for review upon request by the OBO Director or Contracting Department:

3.9.2.1 Copies of executed Subcontractor agreements and purchase orders;

3.9.2.2 Documentation of payments and other transactions with MWSBE Subcontractors/Suppliers;

3.9.2.3 Appropriate explanations of any changes or replacements of MWSBE Subcontractors/Suppliers;

NOTE: All replacement MWSBE Subcontractors/Suppliers must be certified by the Office of Business Opportunity.

3.9.2.4 Any other records required by the OBO Director or Contracting Department.

3.9.3 If a Participation Plan Percentage is not being met, the monthly report shall include a narrative description of the progress being made in MWSBE participation. If sufficient MWSBE Subcontractors or Suppliers to meet the Participation Plan Percentage are being utilized, they should be identified by name and the dollar amount paid to date for work performed or materials furnished by each MWSBE during the monthly period. Reports are required when no activity has occurred in a monthly period.

3.9.4 Design-Builder shall retain all such records for a period of four years following completion of the Work and shall be available at reasonable times and places for inspection by authorized representatives of the City including the City Controller.

Article 4 – Sanctions

4.1 Suspension Period and Waiver

Pursuant to Section 15-86 of the Code of Ordinances, the OBO Director is authorized to suspend for a period of up to, but not to exceed, five years, any Contractor who has failed to make Good Faith Efforts.

4.2 Guidelines for Imposition of Sanctions

4.2.1 General

4.2.1.1 The OBO Director shall not impose any sanction except upon evidence of specific conduct on the part of a MWSBE or Contractor that is inconsistent with or in direct contravention of specific applicable requirements for Good Faith Efforts.

4.2.1.2 Imposition and enforcement of suspensions shall be consistent with applicable state law.

4.2.2 Severity of Sanctions:

4.2.2.1 In determining the length of any suspension, the OBO Director shall consider the following factors:

- a Whether the failure to comply with applicable requirements involved intentional conduct or, alternatively, may be reasonably concluded to have resulted from a misunderstanding on the part of the Contractor or MWSBE of the duties imposed on them by Article V of Chapter 15 of the Code of Ordinances and these procedures;
- b The number of specific incidences of failure by Contractor or MWSBE to comply;
- c Whether the Contractor or MWSBE has been previously suspended;
- d Whether the Contractor or MWSBE has failed or refused to provide the OBO Director with any information requested by the Director or required to be submitted to the Director pursuant to law or these procedures;
- e Whether the Contractor or MWSBE has materially misrepresented any applicable facts in any filing or communication to the OBO Director; and
- f Whether any subsequent restructuring of the subject business or other action has been undertaken to cure the deficiencies in meeting applicable requirements.

4.3 Delegation

A decision to implement a suspension may be taken after notice and an opportunity for a hearing by an impartial person(s) designated by the OBO Director as the hearing officer. The hearing officer(s) shall not have participated in the actions or investigations giving rise to the suspension hearing.

4.4 Notice

- 4.4.1 Prior to imposing any suspension, the OBO Director shall deliver written notice to the Contractor or MWSBE setting forth the grounds for the proposed suspension and setting a date, time, and place to appear before the hearing officer(s) for a hearing on the matter.
- 4.4.2 Any notice required or permitted to be given hereunder to any Contractor or MWSBE may be given either by personal delivery or by certified United States mail, postage prepaid, return receipt requested, addressed to their most recent address as specified in the records of the Office of Business Opportunity or in the Contract if no address is on file with the Office of Business Opportunity.

4.5 Hearing Procedures

Proceedings before a hearing officer shall be conducted informally and in accordance with the OBO Policy and Procedures Manual, as amended, provided that each party may be represented by counsel and may present evidence and cross-examine witnesses. The City shall have the burden to prove by a preponderance of evidence that the Design-Builder's or MWSBE firm's actions constitute misconduct or failure to make Good Faith Efforts. The decision shall be reduced to writing and notice provided to the Contractor or MWSBE.

4.6 Appeals

Appeals authorized pursuant to Section 15-86(b) of the Code of Ordinances shall be conducted by the OBO Director. Pursuant to Section 15-86(b), the Contractor may appeal the OBO Director's decision in accordance with Section 15-23 of the Code of Ordinances and OBO Policy and Procedures.

EXHIBIT L ATTACHMENTS FOLLOW

Attachment A – City of Houston Office of Business Opportunity Good Faith Efforts Policy

General Policy

Good Faith Efforts are steps taken to achieve an Contract Goal or other requirements which, by their scope, intensity and usefulness demonstrates the bidder's responsiveness to fulfill the business opportunity objective prior to the award of a contract, as well as the contractor's responsibility to put forth measures to meet or exceed the Contract Goal throughout the duration of the contract.

Good Faith Efforts are required to be made and demonstrated by an apparent successful bidder on goal oriented contracts or proposer on a regulated contract prior to award of a contract. Good Faith Efforts are required on professional services and construction contracts and on procurement of goods and non-professional service contracts with goals. If a bidder, when submitting a participation plan at the time of bid or proposal submission, anticipates it cannot or will not meet the Contract Goal prior to the award, the bidder must demonstrate to Office of Business Opportunity ("OBO") it has made Good Faith Efforts to meet the Contract Goal, to be eligible for the contract award.

Good Faith Efforts shall be evaluated on a case-by-case basis in making a determination whether a bidder or contractor is in compliance with this policy. The efforts employed by a bidder or contractor should be those that one could reasonably expect a bidder or contractor to take if the bidder were actively and aggressively attempting to obtain MWSBE participation sufficient to meet the Contract Goal. Efforts taken that are mere formalities or other perfunctory acts shall not be considered Good Faith Efforts to meet Contract Goals.

The factors provided herein are representative of the types of actions OBO will consider in determining whether the bidder or contractor made Good Faith Efforts to obtain MWSBE participation to meet the Contract Goal. The factors prescribed below are not intended to be a mandatory checklist, nor is it intended to be exhaustive or exclusive. OBO may consider other factors or types of efforts that may be relevant in appropriate cases.

If a contractor fails to submit Good Faith Efforts documentation as provided in this Policy, it waives the right to appeal OBO decisions related to this Policy. OBO will review all the efforts made by the contractor, including the quality and quantity of those efforts.

Pre-Award

A bidder must submit a participation plan (Document 00470) to OBO at the time the bidder submits the bid. If the participation by certified MWSBE subcontractors documented on the participation plan ("participation") is less than the Contract Goal, a bidder should submit a Record of Good Faith Efforts (Document 00471) with the bid. A bidder should also submit a request for a deviation (Document 00472) if the bidder, having used Good Faith Efforts, reasonably believes that it cannot meet the Contract Goal or a commercially useful deviation.

In making a determination that the bidder has made a good faith effort to meet the Contract Goals, OBO shall consider specific documentation concerning the steps taken to obtain MWSBE participation, with a consideration of, by way of illustration and not limitation, whether the bidder demonstrated a genuine effort to comply with the following factors:

1. Attended any pre-bid or pre-proposal meetings scheduled by the City Department;
2. Followed up with MWSBEs that attended the pre-bid or pre-proposal meetings to discuss subcontracting and supplier opportunities and contacted MWSBEs listed in the City's online directory;
3. Conducted outreach with minority and women focused organizations and associations far in advance of solicitation due date (no less than 10 business days);
4. Identified and designated portions of the work to be performed by MWSBEs to increase the likelihood of meeting the Contract Goals (including where appropriate breaking down the contract into reasonably sized subcontracts to ensure participation);
5. Advertised subcontracting opportunities in news media focused towards minority and women persons far in advance of solicitation due date;
6. Provided MWSBEs with a point of contact that was knowledgeable about the project and possessed decision-making authority to answer questions from interested MWSBEs;

7. Provided a reasonable number of MWSBEs certified with timely written notices via email, mail, and/or fax and/or with documented contact regarding the subcontracting/supplier opportunities. A "reasonable number of MWSBEs" shall be based on the number of MWSBEs available in the directory;
8. Solicited the MWSBEs within a reasonable amount of time (no less than seven business days) before bid submission, as well as followed up with the MWSBEs solicited to determine if they were interested in submitting a bid or proposal or participating on a team.
9. Provided interested MWSBEs certified to perform the solicited work with prompt access to the plans, specifications, scope of work and requirements of the contract;
10. Negotiated in good faith with interested MWSBEs, and not rejecting MWSBEs as unqualified without sound reasons based on a thorough investigation of their capabilities;
11. Entered into a formal contract, or signing enforceable letters of intent with MWSBEs;
12. Provided an explanation to any MWSBE whose bid or price quotation is rejected, unless another MWSBE is accepted for the same work, as follows:
 - a. Where price competitiveness is not the reason for rejection, a written rejection notice including the reason for rejection will be sent to the rejected MWSBE firm;
 - b. Where price competitiveness is the reason for rejection, a meeting must be held with the price-rejected MWSBE, if requested, to discuss the rejection;
13. Made efforts to assist interested MWSBEs in obtaining bonding, lines of credit, insurance required for the contract, and documenting MWSBE denied by bona fide surety agents;
14. Ensured that the conditions and requirements for subcontracts are commensurate with industry standards and would not cause an economic hardship on MWSBEs, such as unnecessary insurance or coupling bid bonds with retainage;
15. Incorporated efforts not attempted earlier or on previous bids that appear more likely to lead to attaining the Contract Goal. Past performance on similar contracts with similar scopes will also be taken in consideration when determining Good Faith Efforts. A bidder that continues to make same efforts without any significant change in the level of participation may not be making Good Faith Efforts.

Post-Award

The contractor must sign the approved participation plan (Document 00470 or Document 00570) prior to starting work on the Project. A contractor should submit a request for deviation (Document 00572) from OBO if the contractor, having made Good Faith Efforts, reasonably believes that it will not achieve the Participation Plan Percentage documented in the approved participation plan. Unless OBO approves a deviation, a contractor must submit to OBO a Participation Summary (Document 00660) prior to City Council's consideration of any close-out, term extension, or change order. If participation is less than anticipated in the approved participation plan, the contractor must submit a Record of Good Faith Efforts (Document 00571) along with the Participation Summary. A contractor that fails to submit a deviation request and Good Faith Efforts documentation waives the right to appeal OBO decisions related to this Policy.

If the contractor is awarded the contract and fails to achieve the established Participation Plan Percentage, the contractor must demonstrate to OBO its efforts to meet the Participation Plan Percentage and failure to do so based on circumstances that the contractor could not reasonably control. In determining whether the contractor made Good Faith Efforts to ensure full participation and achievement of the Participation Plan Percentage, OBO shall consider the following factors:

1. Whether the contractor designated an MWSBE liaison officer to administer the Contractor's MWSBE programs and to be responsible for maintenance of records of Good Faith Efforts.
2. Whether the contractor furnished prompt MWSBE Utilization Reports in a timely and accurate manner through the online Contract Monitoring System or via hard copy.
3. Whether the contractor responded to efforts to resolve disputes with MWSBEs, and genuinely attempted to resolve these issues.

4. Whether the contractor disclosed payment discrepancies timely and within the monthly reporting period;
5. Whether the contractor complied with the participation plan, unless the contractor received a deviation from the OBO Director and whether upon approval, the contractor made Good Faith Efforts to replace a removed MWSBE with another certified firm;
6. Whether the contractor furnished prompt written responses to written inquiries from the Director or any employee of OBO regarding the MWSBE's performance or information germane to the MWSBE's certification;
7. Whether the contractor ensured that at all times during the performance of any contract or subcontract the MWSBE firm is engaging in a commercially useful function as that term is defined in Chapter 15 of the City of Houston Code of Ordinances;
8. Whether the contractor provided the OBO information, or other material, that was factually accurate and free of material misrepresentation; and
9. Whether the contractor furnished prompt responses to requests for information, books and records needed to verify compliance from the department administering the Contract, the City Attorney and the City Controller;
10. Whether the contractor attended all meetings and mediation hearings as requested by the Director or his/her designee; and
11. How the contractor may be affected by change orders, with consideration given to the size of the change orders.

Change Orders

The requirement to make Good Faith Efforts to achieve the approved Participation Plan Percentage is applicable to change orders. Contractors should make Good Faith Efforts to ensure that the Participation Plan Percentage remains substantially the same after the issuance of change orders. If a contractor cannot maintain substantially the same level of participation provided in the latest approved Participation Plan (Document 00470 or Document 00570) due to a change order, the contractor shall submit to the OBO Director and Contracting Department a Document 00571 (Post-Award Record of Good Faith Efforts) and Document 00572 (Post-Award Plan Deviation Request) in a timely manner that does not cause disruption to the project. In addition to other relevant factors, in evaluating whether Good Faith Efforts were made by the contractor to meet the Participation Plan Percentage despite change orders, the OBO Director shall consider the contractor's efforts to timely and efficiently deliver the project.

END OF DOCUMENT

Attachment B – Part 1 – List of Proposed Subcontractors and Supplies

Project Name		Total DBE Award	\$
Original Project Price:		Total MWSBE Award	\$
Project No.:		Total Hub Award	\$
Date of Report		Total PDBE Award	\$

NAICS (6 Digits)	SUBCONTRACTOR OR SUPPLIER (INCLUDE "MWSBE", "PDBE", "DBE", OR "HUB" DESIGNATION)2	ADDRESS	SCOPE OF WORK

NOTES;

1	<p>RETURN FOR ALL PROJECTS AS REQUIRED IN DOCUMENT 00800 - SUPPLEMENTARY CONDITIONS. RETURN WITHIN THE SPECIFIED NUMBER OF DAYS AFTER RECEIPT OF NOTICE OF INTENT TO AWARD</p> <p>DESIGNATE FIRMS CERTIFIED BY THE CITY OFFICE OF BUSINESS OPPORTUNITY ON THIS FORM. DESCRIBE THE WORK TO BE PERFORMED, FOR WHICH THE FIRM IS CERTIFIED, SUCH AS "PAVING", "ELECTRICAL", ETC.</p> <p>CONTRACTOR SHALL EXECUTE CONTRACTS WITH APPROVED SUBCONTRACTORS AND SUPPLIERS WITHIN 30 DAYS AFTER THE DATE OF THE NOTICE TO PROCEED. COPIES OF CONTRACTS WITH DESIGNATED FIRMS MUST BE SENT TO THE OFFICE OF BUSINESS OPPORTUNITY.</p>
2	DESIGNATE FIRMS CERTIFIED BY THE CITY OFFICE OF BUSINESS OPPORTUNITY ON THIS FORM.
3	DESCRIBE THE WORK TO BE PERFORMED, FOR WHICH THE FIRM IS CERTIFIED, SUCH AS "PAVING", "ELECTRICAL", ETC.
4	CONTRACTOR SHALL EXECUTE CONTRACTS WITH APPROVED SUBCONTRACTORS AND SUPPLIERS WITHIN 30 DAYS AFTER THE DATE OF THE NOTICE TO PROCEED. COPIES OF CONTRACTS WITH DESIGNATED FIRMS MUST BE SENT TO THE OFFICE OF BUSINESS OPPORTUNITY.

Signature:	Company Name
Name	Title

Continuation Page

NAICS (6 Digits)	SUBCONTRACTOR OR SUPPLIER (INCLUDE "MWSBE", "PDBE", "DBE", OR "HUB" DESIGNATION)2	ADDRESS	SCOPE OF WORK

Signature:	Company Name
Name	Title

(Type or Print)

Attachment C – Design-Builder’s MWSBE Participation Plan

The Design-Builder shall submit this completed Plan with each Early Work Package Amendment and GMP Amendment, to demonstrate the Design-Builder's plan to meet the amendment-specific MWSBE goal ("Contract Goal"). If the Design-Builder cannot meet the Amendment Goal, the Design-Builder has the burden to demonstrate "Good Faith Efforts", which shall include correctly and accurately preparing and submitting this form, a Record of Good Faith Efforts (Attachment C), and a Request for Deviation from the Goal (Attachment D), the documentation evidencing their "Good Faith Efforts", as required by the City of Houston's Good Faith Efforts Policy (Attachment A). The City will review the Plan and Good Faith Efforts. Visit <http://www.houstontx.gov/obo> for more information.

	MBW	WBE	Total
Contract Goal 0.00%			Design-Builder's Plan Percentage _____

NAICS Code (6 digit)	Descriptino of Work (Plan Sheet #, Unit Price #, Scope of Work #, as applicable)	Bid Price (2 decimal places)	Cert. Type for Goal (MBE, WBE, SBE)	Certified Firm Name Firm Address Contact Name, Phone no., and Email (if applicable)

Signature for Company:	Date:
Print Name:	Phone:

(Type or Print)

*I understand that supplying inaccurate information may violate Texas Penal Code Section 37.10 and lead to City sanctions.

Attachment D – Pre-Bid Good Faith Efforts

Design-Builder Name: _____ Project Name _____

A Design-Builder that may be unable to complete or follow a Participation Plan to meet an Contract Goal as provided in the Contract Documents must submit this completed form as well as a Goal Deviation Request Form (Attachment E), and any other documentation of "Good Faith Efforts" with the draft Early Work Package Amendment or GMP Amendment (see Exhibit "K"). The Design-Builder has the burden to demonstrate "Good Faith Efforts" to meet the MWSBE goal, which includes correctly and accurately preparing and submitting this form and other efforts described in the City's Good Faith Efforts Policy (Attachment A). The Office of Business Opportunity will review Good Faith Efforts and Participation Plan submission of the draft Early Work Package Amendment or GMP Amendment.

UNLESS THE DESIGN-BUILDER'S PARTICIPATION PLAN MEETS THE CONTRACT GOAL, FAILURE TO
SUBMIT THIS FORM MAY BE GROUNDS FOR SANCTIONS.

NAICS Code	Plan Item No.	Type for Goal	Certified Firm Name, Address, Phone #, and Email	Certified Firm Contact Person	Method of Contact	Prime Contact Date	Certified Firm Response	Results of Contact (why)
					Phone () E-Mail () Fax ()	 	 	
					Phone () E-Mail () Fax ()	 	 	
					Phone () E-Mail () Fax ()	 	 	

Authorized
Signature _____ Date _____ Phone _____
Printed Name _____ Email Address _____

CONTINUATION PAGE

NAICS Code	Plan Item No.	Type for Goal	Certified Firm Name, Address, Phone #, and Email	Certified Firm Contact Person	Method of Contact	Prime Contact Date	Certified Firm Response	Results of Contact (why
					Phone () E-Mail () Fax ()	 	 	
					Phone () E-Mail () Fax ()	 	 	
					Phone () E-Mail () Fax ()	 	 	
					Phone () E-Mail () Fax ()	 	 	
					Phone () E-Mail () Fax ()	 	 	

Authorized Signature _____ Date _____ Phone _____

Printed Name _____ Email Address _____

Attachment E – Design-Builder’s MWSBE Goal Deviation Request

Design-Builder’s Name _____

Project Name: _____

Department Approved
Contract Goals

MBE	WBE	SBE	Total
%	%	%	%

Design-Builder’s Proposed
Participation Plan

MBE	WBE	SBE	Total
%	%	%	%

Justification: Please provide the reason the Design-Builder is unable to meet the Contract Goal
In the Contract Documents:

Good Faith Efforts: Please list any efforts not listed in the Design-Builder’s Good Faith Effort Report
(Attachment C)

Date: _____ Design-Builder: _____

Email: _____ By: _____

Phone Number: _____ Title: _____

Post Amendment forms (FORMS 00570 through 00572) will be included with the Early Work Package
Amendment or GMP Amendment.

COH Flowdown - Exhibit N - Pay or Play Terms and Conditions

Please visit our website at: <http://www.houstontx.gov/obo/popforms.html>



City of Houston Pay or Play Program Acknowledgement Form

Form POP- 1



It has been determined that the project currently open for bidding meets the criteria of the City of Houston Play or Pay Program. This form acknowledges your awareness of the Pay or play program which is authorized by Ordinance 2007-534. Your signature below affirms that you will comply with the requirements of the program if you are the successful bidder/proposer, and ensure the same on behalf of subcontracts subject to the Pay or Play Program.

I declare under penalty of perjury under the laws of the State of Texas that if awarded this Contract which meets the criteria for the City of Houston's Pay or Play Program, I will comply with all requirements of the Play or Play Program in Accordance with Executive Order 1-7

*Fill out all information below and submit this form with your bid/proposal packet.

Solicitation Number

Signature

Print Name

Company Name

Email Address

Date



City Vendor ID

Phone Number

Note: For more information contact your POP Liaison or the POP Contract Administrator. All contact information can be found on www.houstontx.gov ➡ Departments ➡ Office of Business Opportunity ➡ Pay or Play

Additional COH Pay or Play Forms

POP Access

	City of Houston Pay or Play Management System Access Request Form	
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To save a copy of this form, download the latest version of Adobe Reader by [clicking here](#).

POPMS site: <http://popms.houstontx.gov>

Date: __/__/__

I. REQUEST INFORMATION (*Required)

*Employee Name: _____
Job Title: _____
Job Function: _____
*Company Name: _____
Address: _____
City: _____
State: _____ Zip: _____
*Phone: _____
*Email: _____

II. REASON FOR REQUEST:

****City of Houston Use Only ****

III. AUTHORIZATION (POP Liaison)

____ APPROVE

____ DENY

NAME

DEPARTMENT

____/____/____
NOTIFICATION DATE

POP-2 - Pay or Play Program

Form POP-2



City of Houston
Certification of Compliance with
Pay or Play Program



Contractor Name: _____ \$ _____
(Contractor/Subcontractor) (Amount of Contract)

Contractor Address: _____

Project No.: [GFS/CIP/AIP/File No.] S-000065-0002-4 4600013557

Project Name: [Legal Project Name] Northeast Water Purification Plant Expansion (NEWPP)

POP Liaison Name: Jesse Ortiz

In accordance with the City of Houston Pay or Play Program authorized by Ordinance 2007-534 and Executive Order 1-7, Contractor/Subcontractor agrees to abide by the terms of this Program. This certification is required of all contractors for contracts subject to the program. You must agree EITHER to PAY or to PLAY for all covered employees. The Contractor/Subcontractor may also Pay on behalf of some covered employees and Play on behalf of other covered employees.

The Contractor/Subcontractor will comply with all provisions of the Pay or Play Program and will furnish all information and reports requested to determine compliance with program requirements of the Pay or Play Program (See Executive Order 1-7 for the terms of the Pay or Play program) The criteria of the program is as follows:

The Contractor/Subcontractor agrees to "Pay" \$1.00 per hour for work performed by covered employees under the contract with the City. If independent contract labor is utilized the Contractor/Subcontractor agrees to report hours worked by the independent contract laborer and pay \$1.00 per hour for work performed.

Otherwise the Contractor/Subcontractor agrees to "Play" by providing health benefits to each covered employee. The health benefits must meet the following criteria:

1. The employer will contribute no less than \$150 per employee per month toward the total premium cost for single coverage only; and
2. The employee contribution, if any amount, will be no greater than 50% of the total premium cost and no more than \$150 per month.
3. Pursuant to E.O. 1-7 section 4.04 a contractor is deemed to have complied with respect to a covered employee who is not provided health benefits if the employee refuses the benefits and the employee's contribution to the premium is no more than \$40 per month.

Please select whether you choose to:	Pay	Play	Both
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The Contractor/Subcontractor will file compliance reports with the City, which will include activity for covered employees subject to the program, in the form and to the extent requested by the administering department. Compliance reports shall contain information including, but not limited to, documentation showing employee health coverage and employee work records.

Note: The Contractor is responsible to the City for the compliance of covered employees of covered subcontractors and only forms that are accurate and complete will be accepted.

*Estimated Number of:	Prime Contractor	Sub-Contractor
Total Employees on City Job		
Covered Employees		
Non-Covered Employees		
Exempt Employees		

***Required**

I hereby certify that the above information is true and correct.

Contractor (Signature) _____ Date _____

Name and Title (Print or type) _____

Document 00630

OBO 7/3/2012

POP-3 – List of Subcontractors



City of Houston Pay or Play Program List of Subcontractors

Form POP-3



Prime Contractor: Houston Waterworks Team
Project Number/Description: NE Water Purification Plant Expansion
S-000065-0002-4 4600013557

POP Contact Person: _____
Address: _____
Email: _____
Phone: _____

Note: Include ALL subcontractors (use additional form if necessary)

Subcontractor Name	Supplier Y/N?	Amount of Subcontract	Check One				Contact Person	Phone	Email Address	Mailing Address
			Pay	Play	Both (Pay and Play)	N/A				
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				

*If the above information is found to be submitted fraudulently with the intent to bypass or deceive the purpose of the Pay or Play Program the contractor will be held liable for all compliance requirements from the inception of the contract. All subcontracts that surpass the \$200,000.00 threshold will be responsible for Pay or Play compliance from the inception of the contract.

Affidavit

I hereby solemnly affirm, certify and confirm that the total sub-contract value stated above is the final value of the contract (C) including all material costs, fuel, payroll, taxes, fees, profit sharing, labor or any payments in relation to the contracted work and no separate payment or contract has been made for the sub-contract under contract no. _____. The above sub-contract value includes all the costs related to work under the contract. The contractor and sub-contractor(s) agree to inform the Office of Business Opportunity of any related cost(s) added to the contracted work and re-submit POP-3 with the current value of the sub-contract. I understand that compliance with "Pay or Play" program is mandatory and nothing has been hidden to circumvent the program requirements.

Contractor Authorized Representative & Title _____ Date _____
Name & Signature

Document 00631

OBO 5/6/2015

POP-4 – Contractor/Subcontractor Waiver Request

Form POP- 4



City of Houston
Pay or Play Program
Contractor/Subcontractor Waiver Request



If a waiver of the Pay or Play Program requirements is requested, the City of Houston contracting department shall submit this Waiver Request form to the City of Houston Office of Business Opportunity Division along with any supporting documentation. A waiver, if granted, shall be effective for the duration of the contract. In the event of renewal or renegotiation of the contract, subsequent waivers may be requested and either granted or denied.

Department: _____ Date Submitted: _____
Contact Name: _____ Phone: _____
Contractor/Subcontractor Name: _____ Vendor No.: _____
Contract No. /Description: _____
Contract/Subcontract Amount: \$ _____ Project Start Date _____ Estimated Comp Date _____

This contract or subcontract is appropriate for a waiver based on the following: *(Check the appropriate box.)*

- ☐ **Emergency.** The contract or subcontract is a response to an emergency that endangers public health or safety.
- ☐ **Essential.** No other qualified responsive bidders comply with the requirements of the Pay or Play Ordinance and the contract or subcontract is for a service or project that is essential to the City or public.
- ☐ **Adverse Impact.** Compliance with the Pay or Play Program would cause an unreasonably adverse impact on the City's ability to obtain services or an unreasonably adverse financial impact on the City.
- ☐ **Bulk Purchasing.** The services to be purchased are available under a bulk purchasing agreement with a federal, state, or local government entity.
- ☐ **Intergovernmental/Interlocal Agreement/Purchasing Cooperative**

Note: Please provide backup documentation that will explain in detail why this contract is a candidate for a waiver.

Department Signature:

Request submitted by department head or authorized representative:

Signature

Signature

Print Name

City of Houston – Office of Business Opportunity Use Only

Action: ☐ Approved ☐ Disapproved

Signature: _____ Date: _____

Print Name: _____

OBO 7/3/2012



Form POP-5



Contact Person: _____ **Phone:** _____ **Email:** _____

EXHIBIT A

POP-7 – Contractor/Subcontractor Reporting form (Play Option)

Form POP-7



City of Houston
Pay or Play Program
Contractor/Subcontractor Reporting Form (Play Option)



Only completed forms will be accepted

The purpose of this form POP-7 is to report compliance by contractors/subcontractors who **opted to provide health benefits** to covered employees in accordance with the City of Houston Pay or Play Program as outlined in EO 1-7. The prime contractor will submit this form, along with proof of payment (photocopies of paid invoices, for example) to the City department that manages the contract within 30 calendar days of the contract award date, and again every quarter thereafter. The prime contractor may submit a separate form for each subcontractor. The City of Houston may request additional documentation to support the information reported on this form.

Initial Report: Yes ☐ No ☐ Report for Quarter Ending _____ Prime ☐ Sub-Contractor ☐

Company Name: _____ \$ _____
(Amount of Contract)

Company Address: _____ Phone _____

Project No: (GFS/CIP/AIP/File No.) 4600013557 Project Name: NEWPP

Health Benefit Provider/Organization _____

Group No. Or Payer ID# _____ Phone _____

Employee Name	New? (X)	InsuranceID # (Please do not use SS#; use Policy # or any other alternate means of identification)	Insurance Premium (Monthly)		Benefit Year Coverage	
			Employer Contribution \$	Employee Contribution \$	Start Date	End Date

OBO-7/3/2012

Form POP-7



**City of Houston
Pay or Play Program
Contractor/Subcontractor Reporting Form (Play Option)**

[illegible]

Contractor Signature:

Update submitted by contractor's authorized representative:

Signature

Print Name

Date Submitted

OBO-7/3/2012

POP-8 – Employee Waiver Request



City of Houston Pay or Play (POP) Program Employee Waiver Request

Form POP-8



Only completed and original notarized forms will be accepted

Company Name: _____ ☐ Contractor ☐ Sub-Contractor Vendor No: _____

Contract # & Description: NEWPP 4600013557 Contracting Dept PWE

We, hereby submit this POP Program Employee Waiver Request for the employee listed below. The employee was offered health benefits in accordance with the POP Program EO1-7. At this time the subject employee has elected not to accept the health benefits offered due to the reason selected below. The notarized affidavit of the employee is appended below for your consideration.

Contractor Representative & Title _____

Signature & Date _____

EMPLOYEE AFFIDAVIT

ALL parts of this section must be completed in full by the employee

I, _____, hereby request exemption from City of Houston's Pay or Play policy due to following: *(Check the appropriate box.)*

- ☐ I am less than 18 years old.
- ☐ I have other health coverage (e.g. through spouse/parents)
- ☐ I have my coverage through Medicare/Medicaid (proof will be required)
- ☐ I declined the coverage because _____

The cost of health benefits offered to me was:

1. My Contribution (**Employee**) \$_____ per pay check (*biweekly*) ☐ OR per month ☐
2. Employer's Contribution (**Contractor**) \$_____ per pay check (*biweekly*) ☐ OR per month ☐

Employee Signature _____

Employee Printed Name _____

NOTARY PUBLIC

The State of _____, County of _____

Before me, a Notary Public, on this day personally appeared _____, known to me (or proved to me on the oath of _____), to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he executed the same for the purpose and consideration therein expressed.

Given under my hand and seal of office, this _____ day of _____, A.D. 20____.

Notary Public, State of Texas or _____
(Your State)

My commission expires The _____ day _____ of 20____.

Do not write below this line, Department use ONLY

Contracting Department Recommendation: Approve ☐ Disapprove ☐ POP Liaison Sign: _____

City of Houston – Office of Business Opportunity: ACTION: ☐ Approved ☐ Disapproved

Signature: _____ Print Name: Jesse Ortiz Date: _____

Important: Please note that this employee exemption is based on good faith. If the above information is found to be incorrect or submitted coercively, the exemption will be cancelled retroactively and will be null and void. In addition, the contractor will have to pay the amounts due towards POP as determined by the Office of Business Opportunity of City of Houston.

OBO-7/3/2012

POP-9 – Self Insured Contractor



**City of Houston
Pay or Play (POP) Program Compliance for
Self Insured Contractor**

POP-9

Contractor Name: _____ () Prime Contractor () Sub-Contractor

Contract # & Description: _____ Contracting Dept _____

We, hereby submit our request for acceptance of our self insured status to comply with City's POP program.

Our self insured plan is funded by _____
and adjudication of health claims and network administration is provided by _____.

We hereby certify, represent and affirm that our health benefits meet the Pay or Play Program's minimum requirements as set in E.O. 1-7. The following documents are being provided to support our self insured status:

(Check the appropriate box. Note: Items 1 thru 4 (first four) below are required)

- ☐ **Representation Letter.** (Explaining the contractor's health benefits program and certifying that information provided and enclosed is true and correct to the best of their knowledge and meets the minimum POP Ordinance requirements.)
- ☐ **Certified copy of COBRA plan rates.**
- ☐ **Confirmation letter from the insurance plan administrator** (confirmation should include their brief introduction and relationship with the Contractor, existence and continuity of self insured program, how long operating as administrator and certification of employees claims processing etc.)
- ☐ **Two copies of Pre-Printed Health Benefits Program –Employee Guide** (Printed/CD)
- ☐ **Average cost of health benefits-Certified by Actuarial or Health Benefits Management Company (HBMC).**
- ☐ **Per Tier Cost of Health Benefits, duly certified by Actuarial or HBMC.**
- ☐ **Other(s)** _____

Contractor Representative & Title

Signature & Date

NOTARY PUBLIC

The State of _____ County of _____
Before me, a Notary Public, on this day personally appeared _____, known to me (or proved to me on the oath of _____), to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that (S)he executed the same for the purpose and consideration therein expressed.

Given under my hand and seal of office, this _____ day of _____, A.D. 20_____.

Notary Public, State of _____
20_____

My commission expires the ____ day of ____

City of Houston Mayor's Office of Business Opportunity (OBO) Use Only

Action: [] Approved [] Disapproved

Signature: _____ Print Name _____ Date _____

Important: Please note that if the above information is found to be incorrect or submitted fraudulently, the self insured status, if granted will be cancelled retroactively and will be null and void. In addition, the contractor will have to pay the amounts due towards POP as determined by Mayor's Office of Business Opportunity (OBO) Department of City of Houston.

COH Flowdown - Exhibit P – Wage Rate Terms

Wage Scale and Payroll Requirements and For Building Construction

Article 1 – Requirements for Engineering Construction

1.1 Wage Scale Requirements

- 1.1.1 Design-Builder and its Subcontractors must pay the general prevailing wage rates for building construction for each craft or type of worker or mechanic employed in the execution of any building construction or repair under the Contract in accordance with Chapter 2258 of the Texas Government Code and City of Houston, Texas Ordinance Nos. 85-2070, 2000-1114, 2001-152, 2006-91 and 2006-168, and 2009- 247 all as amended from time to time. City Council has determined the prevailing wage rate in the locality in which the work is being performed, which is set forth in Exhibit "A".
- 1.1.2 This prevailing wage rate does not prohibit the payment of more than the rates stated.
- 1.1.3 In bidding, Design-Builder warrants and represents that it has carefully examined the classifications for each craft or type of worker needed to execute the Contract and determined that such classifications in Exhibit "A" include all necessary categories to perform the work under the Contract.
- 1.1.4 The wage scale for engineering construction is to be applied to all site work greater than five feet from an exterior wall of new building under construction or from an exterior wall of an existing building.
- 1.1.5 If Design-Builder believes that an additional classification for a particular craft or type of worker is necessary to perform work under the Contract, it must submit with its bid a request to the Contract Compliance Division of the Office Of Business Opportunity ("OBO") to use an additional labor classification not listed in Exhibit "A" and specify the proposed new classification. OBO shall determine whether a proposed classification is already covered in Exhibit "A", and, if it is, specify which classification is appropriate. OBO's decision is conclusive. If OBO decides that a new classification is necessary, it will determine the appropriate prevailing wage rate for any resurveyed, amended, new, or additional craft or type of worker not covered by Exhibit "A". Such determination must be decided in accordance with procedures established by OBO, and in compliance with Chapter 2258 of the Texas Government Code and City of Houston, Texas Ordinance Nos. 85-2070, 2000-1114, 2001-152, 2006-91, 2006-168 and 2009-24 7 subject to City Council approval.
- 1.1.6 Design-Builder must not use any labor classification not covered by Exhibit "A" until such classification is established and approved for use by OBO.
- 1.1.7 A Design-Builder or Subcontractor who violates Chapter 2258 of the Texas Government Code must pay to the City, \$60 per each worker employed for each calendar day or part of the day that the worker is paid less than the wage rates set forth in Exhibit "A".
- 1.1.8 The City may withhold money required to be withheld under Chapter 2258 of the Texas Government Code from the final payment to Design-Builder or earlier payments if City Council makes a determination that there is good cause to believe that Design-Builder has not complied with these provisions and Chapter 2258 of the Government Code, in which case the City may withhold the money at any time subsequent to the finding by City Council.
- 1.1.9 Design-Builder and Subcontractors must keep records specifying:
 - 1.1.9.1 the name and classification of each worker employed under the Contract; and
 - 1.1.9.2 the actual per diem wages paid to each worker, and the applicable hourly rate.The records must be open at all reasonable hours for inspection by the officers and agents of the City.

- 1.1.10 The hourly cost of salary for non-exempt workers for labor in excess of 40 hours per worker per week, shall be calculated at 1.5 times the worker's base pay, plus 1.0 times fringe benefits, for the applicable craft and level.

1.2 Certified Payroll Requirements

- 1.2.1 Employees are paid weekly and payrolls are submitted weekly using the City of Houston's electronic payroll submission module, unless the Design-BUILDER has been instructed to do otherwise by the Office of Business Opportunity. When no work is done after a Design-BUILDER has started work, the Design-BUILDER is required to submit a weekly compliance statement indicating no work was performed. The payrolls must reflect the exact work and classification of the workers, the exact amount that they were paid. Workers must be paid the contracted amount (prevailing wage rates). The Design Builder will be penalized \$60.00 a day for each employee who is underpaid per Texas Government Code §2258-023 for all contracts.
- 1.2.2 Payrolls must be submitted electronically & indicate whether the worker worked inside or outside the building area when both wage rates are applicable to the contract.
- 1.2.3 Payrolls must be submitted each week until all work by the Design-BUILDER is complete and the electronic payroll submission is marked as final in the system.
- 1.2.4 Payrolls must cover a seven day period from the start of the work week and must be consecutive seven day periods until all work is complete.
- 1.2.5 Payrolls must have employees' names, addresses, last four digits of the social security numbers, and job classifications. The job classifications must be the same as the classifications on the prevailing wage rate schedule.
- 1.2.6 A payroll deduction authorization form must be submitted for each employee for any deductions other than Federal and FICA taxes.
- 1.2.7 Employees must be paid overtime (time and a half) for all hours worked over 40 hours a week on both federally and City-funded contracts.
- 1.2.8 The Design-BUILDER has the responsibility to comply with all Internal Revenue Service rules and regulations. Design-BUILDERS who submit certified payrolls with Owner Operators (truckers) must submit a signed tax liability statement from Owner Operator acknowledging their responsibility for Federal Income Tax and FICA reporting obligations.
- 1.2.9 If the Design-BUILDER wants to use the apprentice wage rates for an employee, the apprenticeship certificates must be submitted to the Office of Business Opportunity in advance of the employee working on the project and appearing on the payroll. You must comply with the listed number of journeymen to apprentices as listed.
- 1.2.10 A poster of the Prevailing Wage Rate Schedule should be clearly displayed on each job site from the time the project starts until the work is completed, or in case of annual service agreements, in the Design-BUILDER's office.
- 1.2.11 The Design-BUILDER shall submit the "Certificate from Design-BUILDER Appointing Officer or Employee to Supervise Payment of Employees" (Exhibit "B") to the Monitoring Authority listed in Document 00495 prior to final execution of the contract.
- 1.2.12 During the course of the work, ALL Subcontractors shall submit the "Certificate from Subcontractor Appointing Officer or Employee to Supervise Payment of Employees" (Exhibit "C") to the Monitoring Authority listed in Document 00495.
- 1.2.13 Upon completion of the Project, as part of the contract-awarding department's total clearance process, the Office of Business Opportunity's Contract Compliance Section must review

whether the Wage Rate and Payroll Requirements were met and report the results to the department.

Exhibit A – Labor Classifications and Prevailing Wage Rates for Engineering Construction 2015

EXHIBIT "A" LABOR CLASSIFICATIONS AND PREVAILING WAGE RATES FOR ENGINEERING CONSTRUCTION 2015

CLASSIFICATION	RATE	CLASSIFICATION	RATE
Asphalt Distributor Operator	\$14.06	Milling Machine Operator - Fine Grade	\$13.53
Asphalt Paving Machine Operator	\$14.32	Mixer Operator	\$10.33
Asphalt Raker	\$12.36	Motor Grader Operator- Rough	\$14.23
Asphalt Shoveler	\$11.68	Motor Grader Operator	\$15.69
Broom or Sweeper Operator	\$12.68	Oiler	\$12.12
Bulldozer Operator	\$11.81	Painter-Structures	\$18.62
Carpenter- Rough	\$12.49	Pavement Marking Machine Operator	\$11.18
Concrete Finisher- Paving	\$12.98	Pile Driverman.	\$14.95
Concrete Finisher- Structures	\$12.98	Pipe Layer	\$12.12
Concrete Paving Curbing Machine Operator	\$11.71	Reinforcing Steel Setter - Paving	\$15.15
Concrete Paving Finishing Machine Operator	\$13.07	Reinforcing Steel Setter - Structure	\$14.39
Concrete Paving Joint Sealer Operator	\$11.00	Roller Operator, Pneumatic - Self-propelled	\$11.57
Concrete Paving Saw Operator	\$13.99	Roller Operator, Steel Wheel, Flat Wheel/Tamping	\$11.57
Concrete Paving Spreader Operator	\$10.44	Roller Operator, Steel Wheel, Plant Mix Pavement	\$11.92
Concrete Rubber	\$9.00	Scraper Operator	\$13.47
Crane Clamshell Backhoe Derrick, Dragline, Shovel Operator	\$12.71	Servicer	\$13.97
Crusher and Screening Plant Operator	\$11.29	Sign Installer - PGM	\$8.54
Electrician * 3 Journeyman 2 Apprentice Allowed	\$27.11	Slip Form Machine Operator	\$11.07
Flagger	\$10.33	Spreader Box Operator	\$13.58
Form Builder/Setter- Structures	\$12.23	Structural Steel Worker	\$14.39
Form Liner- Paving and Curb	\$12.34	Tractor Operator - Crawler Type	\$13.68
Form Setter- Paving and Curb	\$12.34	Tractor Operator- Pneumatic	\$10.07
Foundation Drill Operator - Crawler Mounted	\$17.43	Transit Mixer Truck Driver	\$11.00
Foundation Drill Operator - Truck Mounted	\$15.89	Truck Driver, Lowboy-float	\$16.03
Front Loader Operator	\$13.17	Truck Driver, Single-Axle - Heavy	\$11.46
Laborer Common	\$11.02	Truck Driver, Single-Axle - Light	\$11.48
Laborer- Utility	\$11.73	Truck Driver, Tandem Axle Semi-Trailer	\$12.27
Manhole Builder	\$9.00	Work Zone Barricade Servicer	\$11.67
Mechanic	\$16.96	Welders - Receive rate prescribed for craft performing operation to which welding is incidental	
* Apprentices - must be in an approved USDOL Program and cannot exceed ratios			

1.3 Engineering Prevailing Wages Classification Definitions

Asphalt Distributor Operator

Drives distributor truck, sets spray bars and operates valves and levers to control distribution of bituminous material for highway surfacing. May oil, grease or otherwise service and make adjustments to equipment as needed. Performs other related duties.

Asphalt Paving Machine Operator

Operates paving machine that spreads and levels asphaltic concrete on highway subgrade. Controls movement of machine, raises and lowers screed, regulates width of screed. May, oil, grease, service and make adjustments to equipment as needed. Performs other related duties.

Asphalt Raker

Distributes asphaltic materials evenly over road surface by raking and brushing material to correct thickness; directs Laborers when to add or take away material to fill low spots or to reduce high spots. Performs other related duties.

Asphalt Shoveler

A general term used on construction work covering many unskilled classifications requiring work of a physical nature. A laborer works with all crews doing everything from pick and shovel work to cleaning up lumber with hammer, shoveling and placing concrete, uses air tools, cleans concrete joints and fills joints with sealing compound from bucket or with hose and nozzle from a central source, applies coating of oil to inside face of forms, may help set and strip forms, unloads and transports reinforcing steel, cures newly poured concrete, helps lower pipe into ditch for pipelayers, builds fences, works with dirt crew keeping construction layout stakes out of the way of dirt moving equipment.

Broom or Sweeper Operator

Operates a self-propelled machine to sweep and clean roadway surfaces. May oil grease, service and make adjustments to equipment as needed. Performs other related duties.

Bulldozer Operator

Operates a crawler tractor with a bulldozer mounted in front of chassis to level, distribute and push earth or other material. May operate a ripper attachment to break up rock or other hard material. May use a push block on front of tractor to push load scrapers. May oil, grease, or otherwise service and make minor repairs to equipment as needed. Performs other related duties.

Carpenter, Rough

Works from plans to build, assemble, fit together, align, plum, and set in place forms for molding concrete structures. Forms may be wood, steel, aluminum, fiberglass or any other type of material. Checks form while concrete is placed. May install miscellaneous materials integral to concrete structures. May set precast concrete elements. Prepares for slipforming traffic rail and median barrier. May install permanent metal deck forms. May work with power tools. Performs other related duties.

Concrete Finisher, Paving

Finishes the exposed surfaces of fresh concrete paving, median barrier and every element of concrete structures to the final grade and contour structures to the final grade and contour with the use of straight edges and steel trowels. Operates bridge deck finishing machine. Finishes concrete curbs and gutters. Finishes exposed surface of concrete after forms have been removed by patching imperfections with fresh concrete, rubbing surface with abrasive stone, and directing others in removing excess or defective concrete with power tools. Performs other related duties.

Concrete Finisher, Structures

A worker semi-skilled in concrete finishing who assists Concrete finisher by performing specific or general duties of lesser skill and keeping Concrete Finisher supplied with materials, tools, and supplies; cleaning working area an equipment; and holding materials and tools. Performs other related duties.

Concrete Paving Curbing Machine Operator

Operates self - propelled machine(s) which may or may not travel on concrete paving forms, spreading and leveling fresh concrete to grade by use of augers and screeds. May oil, grease or otherwise service and make adjustments to equipment as necessary. Performs other related duties.

Concrete Paving Finishing Machine Operator

Operates self - propelled machine(s) which may or may not travel on concrete paving forms, spreading and leveling fresh concrete to grade by use of augers and screeds. May oil, grease or otherwise service and make adjustments to equipment as necessary. Performs other related duties.

Concrete Paving Joint Sealer Operator

Cleans and seals joints requiring a hot or cold sealing compound in concrete paving, sidewalks, driveway and approach slabs. May oil, grease or make necessary repairs adjustments to equipment as needed. Performs other related duties.

Concrete Paving Saw Operator

Operates a water-cooled power saw with either or an abrasive blade to saw expansion and contraction joints in concrete paving. May also be used to saw asphaltic pavements. May oil grease or otherwise service and make necessary adjustments to equipment as needed. Performs other related duties

Concrete Paving Spreader Operator

Operates self - propelled machine(s) which may or may not travel on concrete paving forms, spreading and leveling fresh concrete to grade by use of augers and screeds. May oil, grease or otherwise service and make adjustments to equipment as necessary. Performs other related duties. **Concrete Rubber**

Finishes the exposed surface of concrete masonry after the forms have been removed by patching holes and broken comers with fresh concrete, rubbing surface with abrasive stone to remove rough spots, and removing high spots and defective concrete with hand chisel and hammer or pneumatic chisel and powered abrasive stone. Performs other related duties.

Crane, Clamshell, Backhoe, Derrick, Dragline, Shovel Operator

A worker who operates a lattice boom type crane can hoist and move materials, raise and lower heavy weights and perform other related operations. May be crawler type or rubber tired. May include placement of rock riprap, clamshell, dragline, pipe and pile driving operations. May oil, grease or otherwise service and make necessary adjustments to equipment as needed. Performs other related duties.

Crusher and Screed Plant Operator

Operates a crusher or screening plant through which rock is run to break it into crushed stone for construction or to control flow of materials not needed. May include minor repairs and may service and make necessary adjustments to equipment as needed. Performs other related duties.

Electrician *3 Journeyman 2 Apprentice

Plans and directs the layout of metal electrical conduit, installs wiring systems, switch-panels, buss bars, works on overhead distribution systems and underground distribution systems. Performs other related duties.

Flagger

A worker who directs traffic in or around a construction site. May use signs or devices to direct traffic. May help assemble, position and clean devices or equipment used to direct traffic. Must be able to effectively communicate with the public. May require certain level of training by TXDOT specifications. Performs other related duties.

Form Builder/Setter, Structures

Fits together, aligns and sets to grade metal and wooden forms for placement of concrete. Forms may be wood, steel, aluminum, fiberglass or any other type of material. Checks forms while concrete is placed. May install miscellaneous materials integral to concrete structures. May set precast concrete elements. Prepares for slipforming traffic rail and median barrier. May install permanent metal deck forms. May work with power tools. Performs other related duties.

Form Liner, Paving & Curb

Fits together, panels align and sets to grade metal and wooden forms for placement of concrete. Works with survey crew to set stringline for panels or moles. Performs other related duties.

Form Setter, Paving & Curb

Fits together, align and set to grade metal and wooden forms for placement of concrete paving and curbs. Works with survey crew to set stringline for paving, curb and gutter curb. Performs other related duties.

Foundation Drill Operator, Crawler Mounted

Operates a hole-drilling machine that is crawler mounted. May include geotechnical operations such as soils nails, rock nails, tiebacks, anchors and jet grouting. May oil, grease or otherwise service and make necessary adjustments to equipment as needed. Performs other related duties.

Foundation Drill Operator, Truck Mounted

Operates a hole drilling machine that is mounted on the rear of a rubber tired vehicle or truck. May include soils nails, rock nails, tiebacks, anchors and jet grouting. Drive truck from location to location or may have laborer who drives truck. May oil, grease or otherwise service and make necessary adjustments to equipment as needed. Performs other related duties.

Front End Loader Operator

Operates a rubber tired, skid steer or crawler type tractor with an attached scoop type bucket on front end. Machine is used to load materials from stockpiles, excavation, charging batch plants, loading and unloading trucks. May be used with attachments in lieu of the bucket. May oil, grease or otherwise service and make necessary adjustments to equipment as needed. Performs other related duties.

Laborer, Common

A general term used on construction work covering many unskilled classifications requiring work of a physical nature. A laborer works with all crews doing everything from pick and shovel work to cleaning up lumber with hammer, shoveling and placing concrete, uses air tools, cleans concrete joints and fills joints with sealing compound from bucket or with hose and nozzle from a central source, applies coating of oil to inside face of forms, may help set and strip forms, unloads and transports reinforcing steel, cures newly poured concrete, helps lower pipe into ditch for pipelayers, builds fences, works with dirt crew keeping construction layout stakes out of the way of dirt moving equipment.

Laborer, Utility

Performs a variety of manual duties, usually working in a utility capacity by working on multiple projects and tasks where demands require workmen with varied experience and ability to work without close direction. Unloads and transports reinforcing steel. May occasionally place and tie reinforcing steel. Directs common laborers in pouring concrete. Erects shoring and bracing. Assists in installation of pipe. Installs, operate and maintains dewatering systems. May assist

equipment operators in positioning machines, verifying grades and signaling operators. Directs truck drivers and scraper operators to dumping positions to maintain grades as directed. Uses power tools and air tools. May work as lead man in a labor crew. His performance of a wide variety of construction jobs distinguishes him from a helper assigned to a specific craft. Installs and maintains erosion control. Is more or less a general utility construction worker. May be second step in learning a skill, and may later become a helper in a specific classification. Performs other related duties.

Manhole Builder

Constructs a means of permanent access to water and sewer lines for maintenance purposes. This work consists of laying brick or concrete slab at bottom of ditch up to an approximate grade line near the surface of the ground. Brick or block is normally laid to form a nearly circular manhole. Brick or block is laid in by eyesight and is normally to a plumb line. Chipped or culled brick can be used quite often is. No effort may be made to keep mortar off the face of the brick and joints are not pointed. May apply coating of concrete to interior and exterior surface. Performs other related duties.

Mechanic

Assembles, set up, adjusts and maintains and repairs all types of construction equipment and trucks. He may perform the duties of a welder in repair of equipment. Performs other related duties.

Milling Machine Operator, Fine Grade

Operates a power-driven milling machine that planes material of the to roadbed and discharges the material into a hauling unit or a windrow. May oil, grease or otherwise service and make necessary adjustments to equipment as needed. Performs other related duties.

Mixer Operator

Performs a variety of manual duties, usually working in a utility capacity by working on multiple projects and tasks where demands require workmen with varied experience and ability to work without close direction. Unloads and transports reinforcing steel. May occasionally place and tie reinforcing steel. Directs common laborers in pouring concrete. Erects shoring and bracing. Assists in installation of pipe. Installs, operate and maintains dewatering systems. May assist equipment operators in positioning machines, verifying grades and signaling operators. Directs truck drivers and scraper operators to dumping positions to maintain grades as directed. Uses power tools and air tools. May work as lead man in a labor crew. His performance of a wide variety of construction jobs distinguishes him from a helper assigned to a specific craft. Installs and maintains erosion control. Is more or less a general utility construction worker. May be second step in learning a skill, and may later become a helper in a specific classification. Performs other related duties.

Motor Grader Operator, Rough

Operates a motor grader. Equipment is used to grade excavation and embankment and to lay asphalt, base and other materials. May blade haul roads and do other general motor grader work, but does not perform finish grade work to close specification tolerances. This operator may be a learner in the first phase of learning the skills of motor grader work. May oil, grease or otherwise service and make necessary adjustments to equipment as needed. Performs other related duties.

Motor Grader Operator

Operates a motor grader. Equipment is used to grade excavation and embankment and to lay asphalt, base and other materials. May blade haul roads and do other general motor grader work, but does not perform finish grade work to close specification tolerances. This operator may be a learner in the first phase of learning the skills of motor grader work. May oil, grease or otherwise service and make necessary adjustments to equipment as needed. Performs other related duties.

Oiler

A learner or semi-skilled worker who under the direction of the watch engineer. May oil and grease or otherwise service all engines and necessary equipment as needed. He may clean and paint engine room as needed. Performs other related duties.

Painter, Structures

Paints and stains structural steel and concrete surfaces of bridges, retaining walls, or other structures. Directs cleaning and abrasive blasting of surfaces prior to painting or staining. Performs other related duties.

Pavement Marking Machine Operator

Operates machine used in laying paint stripes or markers on all types of paving. Loads machine with appropriate materials and may walk or ride on machine. May oil, grease or otherwise service and make necessary adjustments to equipment as needed. Performs other related duties.

Piledriverman

Sets in place, aligns, plumbs, directs driving of timber, concrete, steel, pipe and any other type of piling. Sets, drives and pulls steel, concrete and other types of sheet piling. Rigs pile and leads and bracing. Signals operator. Splices piles before and after driving. Directs pile cutoff. May direct jetting or drilling equipment in connection with installing piles to grade. Performs other related duties.

Pipelayer

Installs concrete, clay, steel, ductile iron, plastic, corrugated pipe and any other type of pipe for storm drainage, water lines, gas lines and sanitary sewer lines. Lays underground communication and electrical ducts. May install and set electrical ground boxes, hand holes, manholes, inlets and other structures. Caulks joints, makes threaded and flanged connections. Installs valves and other accessories. Performs other related duties.

Reinforcing Steel Setter, Paving

Works from plans to lay out and install reinforcing steel within forms or in mats of concrete paving. May direct unloading of material. Determines rigging required to complete work. Gives direction to reinforcing steel worker (helper) or common or utility laborers. May install miscellaneous materials integral to concrete structure or paving. May work with power tools. Performs other related duties.

Reinforcing Steel Setter, Structure

Works from plans to lay out and install reinforcing steel within forms or in mats of concrete paving. May direct unloading of material. Determines rigging required to complete work. Gives direction to reinforcing steel worker (helper) or common or utility laborers. May install miscellaneous materials integral to concrete structure or paving. May work with power tools. Performs other related duties.

Roller Operator, Pneumatic, Self-Propelled

Operates a self-propelled machine with either steel wheels pneumatic tires, which is used to compact and smooth all bituminous materials. May oil, grease or otherwise service and make necessary adjustments to equipment as needed. Performs other related duties.

Roller Operator, Steel Wheel, Flat Wheel/Tamping

Operates a self-propelled machine with either steel wheels or pneumatic tires which is used to compact earth fills, subgrade, flexible base and all other types of materials except bituminous. May oil, grease or otherwise service and make necessary adjustments to equipment as needed. Performs other related duties.

Roller Operator, Steel Wheel, Plant Mix Pavement

Operates a self-propelled machine with either steel wheels pneumatic tires, which is used to compact and smooth all bituminous materials. May oil, grease or otherwise service and make necessary adjustments to equipment as needed. Performs other related duties.

Scraper Operator

Operates a self-contained wheeled tractor scraper both self-loading or assisted by crawler tractors or other scrapers. Used to excavate and transport earth or other materials. May oil, grease or otherwise service and make necessary adjustments to equipment as needed. Performs other related duties.

Servicer

Drives a truck, which carries various fuels, oils, greases and filters. Must have knowledge of and is responsible for the correct oiling and greasing and changing of filters on equipment according to the manufacturers' specifications. Uses compressed air grease guns, wrenches and other tools. May make adjustments to clutches, brakes and other mechanical items. Keeps record of service preventive maintenance records. May have laborer assisting him. May require CDL if driving truck on public highways. Performs other related duties.

Sign Installer (PGM)

Sets forms, reinforcing steel, anchor bolts and pours concrete for Sign foundations. Fabricates and erects pipe and angle Frameworks by bolting, welding or other means prior to installation of signs that are normally prefabricated. Works from plans in location and drilling holes for proper location and alignment of signs. May direct hoisting of signs into place. Fastens signs to framework by bolting and other means. Locates and sets lighting brackets. May perform other work associated with signing projects. Supervises sign erector helper. Performs other related duties.

Slip Form Machine Operator

Cleans and seals joints requiring a hot or cold sealing compound in concrete paving, sidewalks, driveway and approach slabs. May oil, grease or make necessary repairs adjustments to equipment as needed. Performs other related duties.

Spreader Box operator

Operates spreader box by adjusting hopper and strike off blade so that the gravel, stone or other material may be spread to a specific depth on road surface during seal coat and surface treatment operations. May oil, grease or otherwise service and make necessary adjustments to equipment as needed. Performs other related duties.

Structural Steel Worker

Works from plans to lay out and install reinforcing steel within forms or in mats of concrete paving. May direct unloading of material. Determines rigging required to complete work. Gives direction to reinforcing steel worker (helper) or common or utility laborers. May install miscellaneous materials integral to concrete structure or paving. May work with power tools. Performs other related duties.

Tractor Operator, Crawler Type

Operates a crawler tractor with a bulldozer mounted in front of chassis to level, distribute and push earth or other material. May operate a ripper attachment to break up rock or other hard material. May use a push block on front of tractor to push load scrapers. May oil, grease, or otherwise service and make minor repairs to equipment as needed. Performs other related duties.

Tractor Operator, Pneumatic

Operates a gasoline or diesel powered agricultural tractor that tows compaction rollers, plow, disc. water tanks, scrapers and other similar operations. May use other miscellaneous

attachments. May oil, grease or otherwise service and make necessary adjustments to equipment as needed. Performs other related duties.

Traveling Mixer Operator

Drives a gasoline or diesel truck upon which is mounted a concrete mixer. Operates concrete mixer and dumps concrete on the grade, into forms or into concrete pumps or buckets. Cleans mixer drum. May require CDL license for on highway use. May service and make necessary adjustments for proper operation of equipment. Performs other related duties.

Truck driver, lowboy-Float

Drives a heavy-duty diesel-powered truck to which is attached a trailer upon which heavy equipment is hauled. Driver is often required to operate heavy equipment to load or unload the lowboy. May require CDL license for on highway use. May service and make necessary adjustments for proper operation of equipment. Performs other related duties.

Truck driver, Single Axle, Heavy

Drive a light capacity truck for transporting loads of construction material. The truck is of single rear axle type, may have various kinds of beds attached, such as dump, flat bed, tank, etc. May require CDL license for driving on highway. May services and make necessary adjustments for proper operation equipment. Performs other related duties. **Truck driver, Single Axle-Light**

Drive a light capacity truck for transporting loads of construction material. The truck is of single rear axle type, may have various kinds of beds attached, such as dump, flat bed, tank, etc. May require CDL license for driving on highway. May services and make necessary adjustments for proper operation equipment. Performs other related duties.

Truck Driver, Tandem Axle, Semi-Trailer

Drives a diesel-powered tractor pulling a semi trailer hauling materials. Hauls dirt, rock, aggregates or other material. May require CDL license for driving on highway. May service and make necessary adjustments for proper operation of equipment. Performs other related duties.

Work Zone Barricade Servicer

Fabricates, erects and maintains temporary traffic control devices, including arrow boards, signs, barricades, channelizing devices, barrels and all message boards. May operates a truck during traffic control operations.

Welders - Receives rate for craft being performed to which welding is incidental.

Exhibit B – Certificate from Design-Builder Appointing Officer or Employee to Supervise Payment of Employees

Project Name _____

Project WBS# _____ Date _____

(I) (We) herby certify that (I am) (we are) the Design-Builder for

(specify type of job)

In connection with construction of the above-mentioned Project, and that (I) (we) have appointed _____, whose signature appears below, to supervise the payment of (my) (our) employees beginning

_____, 20_____; that he/she is in a position to have full knowledge of the facts set forth in the payroll documents and in the statement of compliance required by the Copeland Act and the City of Houston, which he/she is to execute with (my) (our) full authority and approval until such time as (I) (we) submit to the City of Houston a new certificate appointing some other person for the purposes hereinabove stated.

Phone_____

(Identifying Signature of Appointee)

Attest: _____

(Name of Firm or Corporation)

By: _____ By: _____

(Signature)

(Signature)

(Title)

(Title)

NOTE: This certificate must be executed by an authorized officer of a corporation or by a member of a partnership, and shall be executed prior to and be submitted with the first payroll. Should the appointee be changed, a new certificate must accompany the first payroll for which the new appointee executes a statement of compliance required by the Copeland Act and the City of Houston.

Exhibit C – Certificate from Subcontractor appointing officer or employee to supervise payment of Employees

Project Name _____

Project WBS# _____ Date _____

(I) (We) herby certify that (I am) (we are) the Subcontractor for

(specify type of job)

In connection with construction of the above-mentioned Project, and that (I) (we) have appointed _____, whose signature appears below, to supervise the payment of (my) (our) employees beginning

_____, 20_____; that he/she is in a position to have full knowledge of the facts set forth in the payroll documents and in the statement of compliance required by the Copeland Act and the City of Houston, which he/she is to execute with (my) (our) full authority and approval until such time as (I) (we) submit to the City of Houston a new certificate appointing some other person for the purposes hereinabove stated.

Phone_____

(Identifying Signature of Appointee)

Attest: _____

(Name of Firm or Corporation)

By: _____

(Signature)

(Title)

(Signature)

(Title)

Article 2 – Requirements for Building Construction

2.1 Wage Scale Requirements

- 2.1.1 Design-Builder and its Subcontractors must pay the general prevailing wage rates for building construction for each craft or type of worker or mechanic employed in the execution of any building construction or repair under the Contract in accordance with Chapter 2258 of the Texas Government Code and City of Houston, Texas Ordinance Nos. 85-2070, 2000-1114, 2001-152, 2006-91 and 2006-168, and 2009- 247 all as amended from time to time. City Council has determined the prevailing wage rate in the locality in which the work is being performed, which is set forth in Exhibit "A".
- 2.1.2 This prevailing wage rate does not prohibit the payment of more than the rates stated.
- 2.1.3 In bidding, Design-Builder warrants and represents that it has carefully examined the classifications for each craft or type of worker needed to execute the Contract and determined that such classifications in Exhibit "A" include all necessary categories to perform the work under the Contract.
- 2.1.4 The wage scale for building construction is to be applied to work on a building including an area within 5 feet of the exterior wall.
- 2.1.5 If Design-Builder believes that an additional classification for a particular craft or type of worker is necessary to perform work under the Contract, it must submit with its bid a request to the Contract Compliance Division of the Office of Business Opportunity ("OBO") to use an additional labor classification not listed in Exhibit "A" and specify the proposed new classification. OBO shall determine whether a proposed classification is already covered in Exhibit "A", and, if it is, specify which classification is appropriate. OBO's decision is conclusive. If OBO decides that a new classification is necessary, it will determine the appropriate prevailing wage rate for any resurveyed, amended, new, or additional craft or type of worker not covered by Exhibit "A". Such determination must be decided in accordance with procedures established by OBO, and in compliance with Chapter 2258 of the Texas Government Code and City of Houston, Texas Ordinance Nos. 85-2070, 2000-1114, 2001-152, 2006-91, 2006-168, and 2009-24 7 subject to City Council approval.
- 2.1.6 Design-Builder must not use any labor classification not covered by Exhibit "A" until such classification is established and approved for use by OBO.
- 2.1.7 A Design-Builder or Subcontractor who violates Chapter 2258 of the Texas Government Code must pay to the City, \$60 per each worker employed for each calendar day or part of the day that the worker is paid less than the wage rates set forth in Exhibit "A".
- 2.1.8 The City may withhold money required to be withheld under Chapter 2258 of the Texas Government Code from the final payment to Design-Builder or earlier payments if City Council makes a determination that there is good cause to believe that Design-Builder has not complied with these provisions and Chapter 2258 of the Government Code, in which case the City may withhold the money at any time subsequent to the finding by City Council.
- 2.1.9 Design-Builder and Subcontractors must keep records specifying:
 - 2.1.9.1 the name and classification of each worker employed under the Contract; and
 - 2.1.9.2 the actual per diem wages paid to each worker, and the applicable hourly rate.The records must be open at all reasonable hours for inspection by the officers and agents of the City.
- 2.1.10 The hourly cost of salary for non-exempt workers for labor in excess of 40 hours per worker per week, shall be calculated at 1.5 times the worker's base pay, plus 1.0 times fringe benefits, for the applicable craft and level.

2.2 Certified Payroll Requirements

- 2.2.1 Employees are paid weekly and payrolls are submitted weekly using the City of Houston's electronic payroll submission module, unless the Design-Builder has been instructed to do otherwise by the Office of Business Opportunity. When no work is done after a Design-Builder has started work, the Design-Builder is required to submit a weekly compliance statement indicating no work was performed. The payrolls must reflect the exact work and classification of the workers, the exact amount that they were paid. Workers must be paid the contracted amount (prevailing wage rates). The Design-Builder will be penalized \$60.00 a day for each employee who is underpaid per Texas Government Code §2258-023 for all contracts.
- 2.2.2 Payrolls must be submitted electronically & indicate whether the worker worked inside or outside the building area when both wage rates are applicable to the project.
- 2.2.3 Payrolls must be submitted each week until all work by the Design-Builder is complete and the electronic payroll submission is marked as final in the system.
- 2.2.4 Payrolls must cover a seven-day period from the start of the work week and must be consecutive seven day periods until all work is complete.
- 2.2.5 Payrolls must have employees' names, addresses, last four digits of the social security numbers, and job classifications. The job classifications must be the same as the classifications on the prevailing wage rate schedule.
- 2.2.6 A payroll deduction authorization form must be submitted for each employee for any deductions other than Federal and FICA taxes and court ordered child support.
- 2.2.7 Employees must be paid overtime (time and a half) for all hours worked over 40 hours a week on both federally and City-funded contracts.
- 2.2.8 The Design-Builder has the responsibility to comply with all Internal Revenue Service rules and regulations. Design-Builders who submit certified payrolls with Owner Operators (truckers) must submit a signed tax liability statement from each Owner Operator acknowledging their responsibility for Federal Income Tax and FICA reporting obligations.
- 2.2.9 If the Design-Builder wants to use the apprentice wage rates for an employee, the apprenticeship certificates must be submitted to the Office of Business Opportunity in advance of the employee working on the project and appearing on the payroll. Design-Builder must comply with posted number of journeymen to apprentices or helpers as listed on the wage rate.
- 2.2.10 A poster of the Prevailing Wage Rate Schedule should be clearly displayed on each job site from the time the project starts until the work is completed, or in case of annual service agreements, in the Design-Builder's office.
- 2.2.11 The Design-Builder shall submit the "Certificate from Design-Builder Appointing Officer or Employee to Supervise Payment of Employees" (Exhibit "B") to the Monitoring Authority listed in Document 00495 prior to final execution of the contract.
- 2.2.12 During the course of the work, Subcontractors shall submit the "Certificate from Subcontractor Appointing Officer or Employee to Supervise Payment of Employees" (Exhibit "C") to the Monitoring Authority listed in Document 00495.
- 2.2.13 Upon completion of the Project, as part of the contract-awarding department's total clearance process, the Office of Business Opportunity's Contract Compliance Section must review whether the Wage Rate and Payroll Requirements were met and report the results to the department.

Exhibit A – City of Houston, Texas – Labor Classifications and prevailing wage rates for Building Construction 2015

EXHIBIT "A"
CITY OF HOUSTON, TEXAS
LABOR CLASSIFICATIONS AND PREVAILING WAGE RATES
FOR BUILDING CONSTRUCTION 2015

Worker Classification	Ratio	Base Rate	Fringe Benefit	Wage Total
Asbestos Worker/Insulator *	Ratio 1/1 - Apprentice	\$20.75	\$9.85	\$30.60
Asbestos Abatement Worker (ceilings, walls, floors only)	Ratio 1/3 – Helpers \$9.10	\$14.00	\$0.00	\$14.00
Boilermaker *	Ratio 5/1 - Apprentice	\$23.14	\$21.55	\$44.69
Brick Layer * (see Mason Tender Brick)	Ratio 1/3 – Mason Tender Brick	\$18.87	\$0.00	\$18.87
Carpenter * (including acoustical ceiling work)	Ratio 2/1 - Apprentice	\$21.97	\$7.98	\$29.95
Cement Mason/Concrete Finisher *	Ratio 1/3 Mason Tender Concrete/Concrete	\$13.93	\$0.00	\$13.93
Drywall Finisher/Taper *	Ratio 1/3 – Helpers \$8.54	\$16.27	\$3.66	\$19.93
Drywall Hanger, * incl. metal studs installation	Ratio 1/3 – Helpers \$9.46	\$17.44	\$3.93	\$21.37
Electrician *	Ratio 3/2 - Apprentice	\$27.65	\$7.70	\$35.35
Elevator Mechanic *	Ratio 1/1 - Apprentice	\$38.00	\$26.79	\$64.79
Formbuilder/ Formsetter *	Ratio 1/3 – Helpers \$7.67	\$12.77	\$0.00	\$12.77
Glazier *	Ratio 1/3 – Helper \$11.51	\$14.92	\$2.78	\$17.70
Insulator * (Batt and Foam)	Ratio 1/3 – Helper \$6.50	\$14.87	\$0.73	\$15.60
Ironworker *(Reinforcing)	Ratio 1/3 – Helper \$7.83	\$12.14	\$0.00	\$12.14
Ironworker *(Structural)	Ratio 1/3 – Helper \$10.19	\$22.02	\$6.35	\$28.37
Lather *	Ratio 1/3 – Helper \$13.38	\$19.73	\$0.00	\$19.73
Painter * (Brush, Roller, and Spray)	Ratio 1/3 – Helper \$7.42	\$17.24	\$4.41	\$21.65
Pipe Fitter *(HVAC Pipe only)	Ratio 1/1 - Apprentice	\$29.63	\$10.31	\$39.94
Pipe Fitter *(Excluding HVAC)	Ratio 1/3 – Apprentice \$12.40	\$29.39	\$10.31	\$39.70
Plasterer *	Ratio 1/3 Plaster Tenders	\$19.42	\$1.00	\$20.42
Plumber *	Ratio 3/2 - Apprentice	\$30.29	\$9.50	\$39.79
Roofer *	Ratio 1/3 – Helper \$7.85	\$15.40	\$0.00	\$15.40
Sheet Metal Worker *(incl. HVAC duct and system install.)	Ratio 2/1 - Apprentice	\$25.37	\$12.39	\$37.76
Sprinkler Fitter * (Fire sprinklers)	Ratio 1/1 – Apprentice	\$26.36	\$16.52	\$42.88
Tile Finisher *	Ratio 1/3 – Helper \$8.08	\$12.00	\$0.43	\$12.43
Tile Setter *	Ratio 1/3 – Helper \$10.91	\$16.17	\$0.00	\$16.17
Truck Driver		\$14.18	\$0.00	\$14.18
Laborers:				
Common Laborer		\$9.29	\$0.00	\$9.29
Mason Tender (Bricklayer's Helper)		\$10.13	\$0.00	\$10.13
Mason Tender (Cement /Concrete Finisher's Helper)		\$9.86	\$0.00	\$9.86
Pipe Layer		\$12.35	\$0.00	\$12.35
Plaster Tender (Plasterer's helper)		\$12.90	\$2.51	\$15.41
Power Equipment Operator:				
Asphalt Paver		\$13.50	\$0.25	\$13.75
Backhoe – Power Equipment Operator		\$12.54	\$0.00	\$12.54
Crane – Power Equipment Operator		\$34.85	\$9.85	\$44.70
Forklift – Power Equipment Operator		\$16.00	\$0.00	\$16.00
Slab and Wall Saw – Power Equipment Operator		\$15.54	\$3.83	\$19.37
Welders - Receive rate prescribed for craft performing operation in which welding is incidental				
* When Apprentices are shown, Helpers cannot be utilized. See Definitions for allowable journeymen to apprentice/helpers.				

2.3 Building Construction Prevailing Wages Classification Definitions

Asbestos Worker/Insulator* - Ratio 1 Journeyman /1 Apprentice

(Including application of all insulating materials, protective coverings, coatings and finishing to all type of mechanical systems). Applies insulating material to exposed surfaces of structures, such as air ducts, hot and cold pipes, storage tanks, and cold storage rooms: Reads blueprints and selects required insulation material (in sheet, tubular, or roll form), such as fiberglass, foam rubber, Styrofoam, cork, or urethane, based on material's heat retaining or excluding characteristics. Brushes adhesives on or attaches metal adhesive backed pins to flat surfaces as necessary to facilitate application of insulation material. Measures and cuts insulation material to specified size and shape for covering flat or round surfaces, using tape measure, knife, or scissors. Fits, wraps, or attaches required insulation material around or to structure, following blueprint specifications. Covers or seals insulation with preformed plastic covers, canvas strips, sealant, or tape to secure insulation to structure, according to type of insulation used and structure covered, using staple gun, trowel, paintbrush, or caulking gun.

Asbestos Abatement Worker* (Ceilings, Floors, & Walls only) - Ratio 1 Journeyman /3 Helpers

Removes asbestos from ceilings, walls, beams, boilers, and other structures, following hazardous waste handling guidelines: Assembles scaffolding and seals off work area, using plastic sheeting and duct tape. Positions mobile decontamination unit or portable showers at entrance of work area. Builds connecting walkway between mobile unit or portable showers and work area, using hand tools, lumber, nails, plastic sheeting, and duct tape. Positions portable air evacuation and filtration system inside work area. Sprays chemical solution over asbestos covered surfaces, using tank with attached hose and nozzle, to soften asbestos. Cuts and scrapes asbestos from surfaces, using knife and scraper. Shovels asbestos into plastic disposal bags and seals bags, using duct tape. Cleans work area of loose asbestos, using vacuum, broom, and dustpan. Places asbestos in disposal bags and seals bags, using duct tape. Dismantles scaffolding and temporary walkway, using hand tools, and places plastic sheeting and disposal bags into transport bags. Seals bags, using duct tape, and loads bags into truck.

Boilermaker* - Ratio 5 Journeymen /1 Apprentice

Assembles, analyzes defects in, and repairs boilers, pressure vessels, tanks, and vats in field, following blueprints and using hand tools and portable power tools and equipment: Locates and marks reference points for columns or plates on foundation, using master straightedge, squares, transit, and measuring tape, and applying knowledge of geometry. Attaches rigging or signals crane operator to lift parts to specified position. Aligns structures or plate sections to assemble boiler frame, tanks, or vats, using plumb bobs, levels, wedges, dogs, or turnbuckles. Hammers, flame cuts, files, or grinds irregular edges of sections or structural parts to facilitate fitting edges together. Bolts or arc-welds structures and sections together. Positions drums and headers into supports and bolts or welds supports to frame. Aligns water tubes and connects and expands ends to drums and headers, using tube expander. Bells, beads with power hammer, or welds tube ends to ensure leak proof joints. Bolts or welds casing sections, uptakes, stacks, baffles, and such fabricated parts as chutes, air heaters, fan stands, feeding tube, catwalks, ladders, coal hoppers, and safety hatch to frame, using wrench. Installs manholes, hand holes, valves, gauges, and feed water connection in drums to complete assembly of water tube boilers. Assists in testing assembled vessels by pumping water or gas under specified pressure into vessel and observing instruments for evidence of leakage. Repairs boilers or tanks in field by unbolting or flame cutting defective sections or tubes, straightening plates, using torch or jacks, installing new tubes, fitting and welding new sections and replacing worn lugs on bolts. May rivet and caulk sections of vessels, using pneumatic riveting and caulking hammers.

Bricklayer * (See Mason Tender) - Ratio 1 Journeyman /3 Mason Tender Brick

Lays building materials, such as brick, structural tile, and concrete cinder, glass, gypsum, and terra cotta block (except stone) to construct or repair walls, partitions, arches, sewers, and other structures: Measures distance from reference points and marks guidelines on working surface to

lay out work. Spreads soft bed (layer) of mortar that serves as base and binder for block, using trowel. Applies mortar to end of block and positions block in mortar bed. Taps block with trowel to level, align, and embed in mortar, allowing specified thickness of joint. Removes excess mortar from face of block, using trowel. Finishes mortar between brick with pointing tool or trowel. Breaks bricks to fit spaces too small for whole brick, using edge of trowel or brick hammer. Determines vertical and horizontal alignment of courses, using plumb bob, gauge line (tightly stretched cord), and level. Fastens brick or terra cotta veneer to face of structures, with tie wires embedded in mortar between bricks, or in anchor holes in veneer brick. May weld metal parts to steel structural members. May apply plaster to walls and ceiling, using trowel, to complete repair work.

Carpenter* (Including Acoustical Ceiling Work) - Ratio 2 Journeymen /1 Apprentice

Constructs, erects, installs, and repairs structures and fixtures of wood, plywood, and wallboard, using carpenter's hand tools and power tools, and conforming to local building codes: Studies blueprints, sketches, or building plans for information pertaining to type of material required, such as lumber or fiberboard, and dimensions of structure or fixture to be fabricated. Selects specified type of lumber or other materials. Prepares layout, using rule, framing square, and calipers. Marks cutting and assembly lines on materials, using pencil, chalk, and marking gauge. Shapes materials to prescribed measurements, using saws, chisels, and planes. Assembles cut and shaped materials and fastens them together with nails, dowel pins, or glue. Verifies trueness of structure with plumb bob and carpenter's level. Erects framework for structures and lays subflooring. Builds stairs and lays out and installs partitions and cabinetwork. Covers sub floor with building paper to keep out moisture and lays hardwood, parquet, and wood-strip-block floors by nailing floors to sub floor or cementing them to mastic or asphalt base. Applies shock-absorbing, sound-deadening, and decorative paneling to ceilings and walls. Fits and installs prefabricated window frames, doors, doorframes, weather stripping, interior and exterior trim, and finish hardware, such as locks, letter drops, and kick plates. Constructs forms and chutes for pouring concrete. Erects scaffolding and ladders for assembling structures above ground level. May weld metal parts to steel structural members.

Cement Mason/Concrete Finisher* (Mason Tender Cement/Concrete) - Ratio 1 Journeyman /3 Mason Tender Cement

Finisher; concrete floater Smooths and finishes surfaces of poured concrete floors, walls, sidewalks, or curbs to specified textures, using hand tools or power tools, including floats, trowels, and screeds: Signals concrete deliverer to position truck to facilitate pouring concrete. Moves discharge chute of truck to direct concrete into forms. Spreads concrete into inaccessible sections of forms, using rake or shovel. Levels concrete to specified depth and workable consistency, using hand held screed and floats to bring water to surface and produce soft topping. Smooths, and shapes surfaces of freshly poured concrete, using straightedge and float or power screed. Finishes concrete surfaces, using power trowel, or wets and rubs concrete with abrasive stone to impart finish. Removes rough or defective spots from concrete surfaces, using power grinder or chisel and hammer, and patches holes with fresh concrete or epoxy compound. Molds expansion joints and edges, using edging tools, jointers, and straightedge. May sprinkle colored stone chips, powdered steel, or coloring powder on concrete to produce prescribed finish. May produce rough concrete surface, using broom. May mix cement, using hoe or concrete-mixing machine. May direct sub grade work, mixing of concrete, and setting of forms.

Drywall Finisher/Taper - Ratio 1 Journeyman /3 Helpers

Wallboard and plasterboard; sheetrock taper; taper and bedder; taper and floater. Seals joints between plasterboard or other wallboards to prepare wall surface for painting or papering; Mixes sealing compound by hand or with portable electric mixer, and spreads compound over joints between boards, using trowel, broad knife, or spatula. Presses paper tape over joint to embed tape into compound and seal joint, or tapes joint, using mechanical applicator that spreads compound and embeds tape in one operation. Spreads and smooth's cementing material over tape, using trowel or floating machine to blend joint with wall surface. Sands rough spots after cement has dried. Fills cracks and holes in walls and ceiling with sealing compound. Installs metal molding at corners in lieu of sealant and tape. Usually works as member of crew. May apply texturing compound and primer to walls and ceiling preparatory to final finishing, using

brushes, roller, or spray gun. May countersink nails or screws below surface of wall prior to applying sealing compound, using hammer or screwdriver.

Drywall Hanger - Ratio 1 Journeyman /3 Helpers

Dry-wall installer; gypsum dry-wall systems installer. Plans gypsum drywall installations, erects metal framing and furring channels for fastening drywall, and installs drywall to cover walls, ceilings, soffits, shafts, and movable partitions in residential, commercial, and industrial buildings: Reads blueprints and other specifications to determine method of installation, work procedures, and material, tool, and work aid requirements. Lays out reference lines and points for use in computing location and position of metal framing and furring channels and marks position for erecting metalwork, using chalk line. Measures, marks, and cuts metal runners, studs, and furring channels to specified size, using tape measure, straightedge and hand and portable power cutting tools. Secures metal framing to walls and furring channels to ceilings, using hand and portable power tools. Measures and marks cutting lines on drywall, using square, tape measure, and marking devices. Scribes cutting lines on drywall, using straightedge and utility knife and breaks board along cut lines. Fits and fastens board into specified position on wall, using screws, hand tools, portable power tools, or adhesive. Cuts openings into board for electrical outlets, vents, or fixtures, using keyhole saw or other cutting tools. Measures, cuts, assembles, and installs metal framing and decorative trim for windows, doorways, and vents. Fits, aligns, and hangs doors and installs hardware, such as locks and kick plates (includes installing metal studs).

Electrician - Ratio 3 Journeymen /2 Apprentice

Plans layout, installs, and repairs wiring, electrical fixtures, apparatus, and control equipment: Plans new or modified installations to minimize waste of materials, provide access for future maintenance, and avoid unsightly, hazardous, and unreliable wiring, consistent with specifications and local electrical codes. Prepares sketches showing location of wiring and equipment, or follows diagrams or blueprints, ensuring that concealed wiring is installed before completion of future walls, ceilings, and flooring. Measures, cuts, bends, threads, assembles, and installs electrical conduit, using tools, such as hacksaw, pipe threader, and conduit bender. Pulls wiring through conduit. Splices wires by stripping insulation from terminal leads, using knife or pliers, twisting or soldering wires together, and applying tape or terminal caps. Connects wiring to lighting fixtures and power equipment, using hand tools. Installs control and distribution apparatus, such as switches, relays, and circuit-breaker panels, fastening in place with screws or bolts, using hand tools and power tools. Connects power cables to equipment, such as electric range or motor, and installs grounding leads. Tests continuity of circuit to ensure electrical compatibility and safety of components, using testing instruments, such as ohmmeter, battery and buzzer, and oscilloscope. Observes functioning of installed equipment or system to detect hazards and need for adjustments, relocation, or replacement (Including Pulling Wire and Low Voltage Wiring and Installation of Fire Alarms, Security Systems, Telephones, and Computers).

Elevator Mechanic* - Ratio 1 Journeyman /1 Apprentice

FOOTNOTES: a. - Employer contributes 8% of basic hourly rate for over 5 years ' service and 6% of basic hourly rate for 6 months to 5 years' service as Vacation Pay Credit. Paid Holidays: New Year's Day;

Memorial Day; Independence Day Labor Day; Thanksgiving Day; Friday after Thanksgiving Day; Christmas Day.

Erector; elevator installer; elevator mechanic.

Assembles and installs electric and hydraulic freight and passenger elevators, escalators, and dumbwaiters, determining layout and electrical connections from blueprints: Studies blueprints and lays out location of framework, counterbalance rails, motor pump, cylinder, and plunger foundations. Drills holes in concrete or structural steel members with portable electric drill. Secures anchor bolts or welds brackets to support rails and framework, and verifies alignment with plumb bob and level. Cuts prefabricated sections of framework, rails, and other elevator components to specified dimensions, using acetylene torch, power saw, and disk grinder. Installs cables, counterweights, pumps, motor foundations, escalator drives, guide rails, elevator cars, and control panels, using hand tools. Connects electrical wiring to control panels and electric

motors. Installs safety and control devices. Positions electric motor and equipment on top of elevator shaft, using hoists and cable slings.

Formbuilder/Formsetter - Ratio 1 Journeyman /3 Helpers

Constructs built-in-place or prefabricated wooden forms, according to specifications, for molding concrete structures: Studies blueprints and diagrams to determine type and dimension of forms to be constructed. Saws lumber to blueprint dimensions, using handsaw or power saw, and nails lumber together to make form panels. Erects built-in-place forms or assemblies and installs prefabricated forms on construction site according to blueprint specifications, using hand tools, plumb rule, and level. Inserts spreaders and tie rods between opposite faces of form to maintain specified dimensions. Anchors and braces forms to fixed objects, using nails, bolts, anchor rods, steel cables, planks, and timbers.

Glazier - Ratio 1 Journeyman /3 Helpers

Installs glass in windows, skylights, store fronts, and display cases, or on surfaces, such as building fronts, interior walls, ceilings, and tabletops: Marks outline or pattern on glass, and cuts glass, using glasscutter. Breaks off excess glass by hand or with notched tool. Fastens glass panes into wood sash with glaziers points, and spreads and smoothes putty around edge of panes with knife to seal joints. Installs mirrors or structural glass on building fronts, walls, ceilings, or tables, using mastic, screws, or decorative molding. Bolts metal hinges, handles, locks, and other hardware to prefabricated glass doors. Sets glass doors into frame and fits hinges. May install metal window and doorframes into which glass panels are to be fitted. May press plastic adhesive film to glass or spray glass with tinting solution to prevent light glare. May install stained glass windows.

Insulator (Batt and Foam) - Ratio 1 Journeyman /3 Helpers

Applies batt and form insulation to walls, ceilings and other surfaces according to manufacturers' specifications and blue print instructions. May use sealants such as cement plaster or asphalt compound to seal insulation; may spread concrete over floor slabs to form wearing floor: brushes adhesives, cuts insulating materials to specified shape to cover surfaces; uses tape or other sealants to adhere insulation to surfaces. May use staple gun, towel, paintbrushes and caulking guns.

Ironworker (Reinforcing) - Ratio 1 Journeyman/3 Helpers

Positions and secures steel bars in concrete forms to reinforce concrete; places rods in forms, spacing and fastening together with wire and pliers. Cuts bars using hacksaw, bar cutters or acetylene torch. Bends steel rods with hand tools or rod bending machine; reinforces concrete with wire mesh; welds reinforcing bars together.

Ironworker (Structural) - Ratio 1 Journeyman /3 Helpers

Erector; ironworker; steel erector; structural-iron erector; structural-iron worker; structural steel erector. Performs any combination of following duties to raise, place, and unite girders, columns, and other structural steel members to form completed structures or structure frameworks, working as member of crew: Sets up hoisting equipment for raising and placing structural-steel members. Fastens steel members to cable of hoist, using chain, cable, or rope. Signals worker operating hoisting equipment to lift and place steel member. Guides member, using tab line (rope) or rides on member in order to guide it into position. Pulls, pushes, or pries steel members into approximate position while member is supported by hoisting device. Forces members into final position, using turnbuckles, crowbars, jacks, and hand tools. Aligns rivet holes in member with corresponding holes in previously placed member by driving drift pins or handle of wrench through holes. Verifies vertical and horizontal alignment of members, using plumb bob and level.

Lather - Ratio 1 Journeyman /3 Helpers

Fastens wooden, metal, or rockboard lath to walls, ceilings, and partitions of buildings to provide supporting base for plaster, fireproofing, or acoustical material, using hand tools and portable power tools: Erects horizontal metal framework to which laths are fastened, using nails, bolts, and studgun. Drills holes in floor and ceiling, using portable electric tool, and drives ends of wooden or metal studs into holes to provide anchor for furring or rockboard lath. Wires horizontal strips to furring to stiffen framework. Cuts lath to fit openings and projections, using hand tools or portable

power tools. Wires, nails, clips, or staples lath to framework, ceiling joists, and flat concrete surfaces. Bends metal lath to fit corners, or attaches preformed corner reinforcements. Wires plasterer's channels to overhead structural framework to provide support for plaster or acoustical ceiling tile.

Painter (Brush, Roller, and Spray) - Ratio 1 Journeyman /3 Helpers

Applies coats of paint, varnish, stain, enamel, or lacquer to decorate and protect interior or exterior surfaces, trimmings, and fixtures of buildings and other structures: Reads work order or receives instructions from supervisor or homeowner regarding painting. Smooths surfaces, using sandpaper, brushes, or steel wool, and removes old paint from surfaces, using paint remover, scraper, wire brush, or blowtorch to prepare surfaces for painting. Fills nail holes, cracks, and joints with caulk, putty, plaster, or other filler, using caulking gun and putty knife. Selects premixed paints, or mixes required portions of pigment, oil, and thinning and drying substances to prepare paint that matches specified colors. Removes fixtures, such as pictures and electric switchcovers, from walls prior to painting, using screwdriver. Spreads dropcloths over floors and room furnishings, and covers surfaces, such as baseboards, doorframes, and windows with masking tape and paper to protect surfaces during painting. Paints surfaces, using brushes, spray gun, or paint rollers. Simulates wood grain, marble, brick, or tile effects. Applies paint with cloth, brush, sponge, or fingers to create special effects. Erects scaffolding or sets up ladders to perform tasks above ground level.

Pipe fitter * (HVAC Pipe Only) - Ratio 1 Journeymen /1 Apprentice (See Schedule included)

Lays out, assembles, installs, and maintains pipe systems, pipe supports, and related hydraulic and pneumatic equipment for steam, hot water, heating, cooling, lubricating, sprinkling, and industrial production and processing systems, applying knowledge of system operation, and following blueprints: Selects type and size of pipe, and related materials and equipment, such as supports, hangers, and hydraulic cylinders, according to specifications. Inspects work site to determine presence of obstructions and to ascertain that holes cut for pipe will not cause structural weakness. Plans installation or repair to avoid obstructions and to avoid interfering with activities of other workers. Cuts pipe, using saws, pipe cutter, hammer and chisel, cutting torch, and pipe cutting machine. Threads pipe, using pipe threading machine. Bends pipe, using pipe bending tools and pipe bending machine. Assembles and installs variety of metal and nonmetal pipes, tubes, and fittings, including iron, steel, copper, and plastic. Connects pipes, using threaded, caulked, soldered, brazed, fused, or cemented joints, and hand tools. Secures pipes to structure with brackets, clamps, and hangers, using hand tools and power tools. Installs and maintains hydraulic and pneumatic components of machines and equipment, such as pumps and cylinders, using hand tools. Installs and maintains refrigeration and air-conditioning systems, including compressors, pumps, meters, pneumatic and hydraulic controls, and piping, using hand tools and power tools, and following specifications and blueprints. Increases pressure in pipe system and observes connected pressure gauge to test system for leaks.

Pipe Fitter* (Excluding HVAC Pipe)- Ratio 1 Journeymen /3 Helpers

Lays out, assembles, installs, and maintains pipe systems, pipe supports, and related hydraulic and pneumatic equipment for steam, hot water, heating, cooling, lubricating, sprinkling, and industrial production and processing systems, applying knowledge of system operation, and following blueprints: Selects type and size of pipe, and related materials and equipment, such as supports, hangers, and hydraulic cylinders, according to specifications. Inspects work site to determine presence of obstructions and to ascertain that holes cut for pipe will not cause structural weakness. Plans installation or repair to avoid obstructions and to avoid interfering with activities of other workers. Cuts pipe, using saws, pipe cutter, hammer and chisel, cutting torch, and pipe cutting machine. Threads pipe, using pipe-threading machine. Bends pipe, using pipe bending tools and pipe bending machine. Assembles and installs variety of metal and nonmetal pipes, tubes, and fittings, including iron, steel, copper, and plastic. Connects pipes, using threaded, caulked, soldered, brazed, fused, or cemented joints, and hand tools. Secures pipes to structure with brackets, clamps, and hangers, using hand tools and power tools. Installs and maintains hydraulic and pneumatic components of machines and equipment, such as pumps and cylinders, using hand tools. Installs and maintains refrigeration and air-conditioning systems,

including compressors, pumps, meters, pneumatic and hydraulic controls, and piping, using hand tools and power tools, and following specifications and blueprints. Increases pressure in pipe system and observes connected pressure gauge to test system for leaks. May weld pipe supports to structural steel members. May observe production machines in assigned area of manufacturing facility to detect machinery malfunctions. May operate machinery to verify repair. May modify programs of automated machinery, such as robots and conveyors, to change motion and speed of machine, using teach pendant, control panel, or keyboard and display screen of robot controller and programmable controller. May be designated Steam Fitter (construction) when installing piping systems that must withstand high pressure

Plasterer* See Plaster Tender - Ratio 1 Journeyman /3 Plaster Tenders

Applies coats of plaster to interior walls, ceilings, and partitions of buildings, to produce finished surface, according to blueprints, architect's drawings, or oral instructions, using hand tools and portable power tools: Directs workers to mix plaster to desired consistency and to erect scaffolds. Spreads plaster over lath or masonry base, using trowel, and smoothes plaster with darby and float to attain uniform thickness. Applies scratch, brown, or finish coats of plaster to wood, metal, or board lath successively. Roughens undercoat with scratcher (wire or metal scraper) to provide bond for succeeding coats of plaster.

Plumber* (Excluding HVAC Pipe) - Ratio 3 Journeymen /2 Apprentice

Assembles, installs, and repairs pipes, fittings, and fixtures of heating, water, and drainage systems, according to specifications and plumbing codes: Studies building plans and working drawings to determine work aids required and sequence of installations. Inspects structure to ascertain obstructions to be avoided to prevent weakening of structure resulting from installation of pipe. Locates and marks position of pipe and pipe connections and passage holes for pipes in walls and floors, using ruler, spirit level, and plumb bob. Cuts openings in walls and floors to accommodate pipe and pipe fittings, using hand tools and power tools. Cuts and threads pipe, using pipe cutters, cutting torch, and pipe-threading machine. Bends pipe to required angle by use of pipe-bending machine or by placing pipe over block and bending it by hand. Assembles and installs valves, pipe fittings, and pipes composed of metals, such as iron, steel, brass, and lead, and nonmetals, such as glass, vitrified clay, and plastic, using hand tools and power tools. Joins pipes by use of screws, bolts, fittings, solder, plastic solvent, and caulks joints. Fills pipe system with water or air and reads pressure gauges to determine whether system is leaking. Installs and repairs plumbing fixtures, such as sinks, commodes, bathtubs, water heaters, hot water tanks, garbage disposal units, dishwashers, and water softeners. Repairs and maintains plumbing by replacing washers in leaky faucets, mending burst pipes, and opening clogged drains.

Roofer - Ratio 1 Journeyman/3 Helpers

Covers roofs with roofing materials other than sheet metal, such as composition shingles or sheets, wood shingles, or asphalt and gravel, to waterproof roofs: Cuts roofing paper to size, using knife, and nails or staples it to roof in overlapping strips to form base for roofing materials. Installs gutters and down spouts. Aligns roofing material with edge of roof, and overlaps successive layers, gauging distance of overlap with chalk line, gauge on shingling hatchet, or by lines on shingles. Fastens composition shingles or sheets to roof with asphalt, cement, or nails. Punches holes in slate, tile, terra cotta, or wooden shingles, using punch and hammer. Cuts strips of flashing and fits them into angles formed by walls, vents, and intersecting roof surfaces. When applying asphalt or tar and gravel to roof, mops or pours hot asphalt or tar onto roof base. Applies alternate layers of hot asphalt or tar and roofing paper until roof covering is as specified. Applies gravel or pebbles over top layer, using rake or stiff bristled broom.

Sheet metal worker* Ratio 2 Journeymen /1 Apprentice (Including Setting HVAC Duct & System Installs) Fabricates, assembles, installs and repairs sheet metal products, including sheet metal roof (also see Roofer). Operates soldering and welding equipment to join together sheet metal parts. Seals seams and joints with sealant. Installs roof sheets, trims, flashing, gutters down spouts and other related items. Performs other related duties.

Sprinkler Fitter (Fire)* - Ratio 1 Journeyman ii Apprentice

Lays out, assembles, installs, and maintains pipe systems, pipe supports, and related hydraulic and pneumatic equipment for steam, hot water, heating, cooling, lubricating, sprinkling, and industrial production and processing systems, applying knowledge of system operation, and following blueprints: Selects type and size of pipe, and related materials and equipment, such as supports, hangers, and hydraulic cylinders, according to specifications. Inspects work site to determine presence of obstructions and to ascertain that holes cut for pipe will not cause structural weakness. Plans installation or repair to avoid obstructions and to avoid interfering with activities of other workers. Cuts pipe, using saws, pipe cutter, hammer and chisel, cutting torch, and pipe cutting machine. Threads pipe, using pipe-threading machine. Bends pipe, using pipe bending tools and pipe bending machine. Assembles and installs variety of metal and nonmetal pipes, tubes, and fittings, including iron, steel, copper, and plastic. Connects pipes, using threaded, caulked, soldered, brazed, fused, or cemented joints, and hand tools. Secures pipes to structure with brackets, clamps, and hangers, using hand tools and power tools. Installs and maintains hydraulic and pneumatic components of machines and equipment, such as pumps and cylinders, using hand tools. Installs and maintains refrigeration and air-conditioning systems, including compressors, pumps, meters, pneumatic and hydraulic controls, and piping, using hand tools and power tools, and following specifications and blueprints. Increases pressure in pipe system and observes connected pressure gauge to test system for leaks. May weld pipe supports to structural steel members. May observe production machines in assigned area of manufacturing facility to detect machinery malfunctions. May operate machinery to verify repair. May modify programs of automated machinery, such as robots and conveyors, to change motion and speed of machine, using teach pendant, control panel, or keyboard and display screen of robot controller and programmable controller.

Tile Finisher - Ratio 1 Journeyman /3 Helpers

Supplies and mixes construction materials for TILE SETTER (construction) 861.381-054, applies grout, and cleans installed tile: Moves tiles, tile setting tools, and work devices from storage area to installation site manually or using wheelbarrow. Mixes mortar and grout according to standard formulas and request from TILE SETTER (construction), using bucket, water hose, spatula, and portable mixer. Supplies TILE SETTER (construction) with mortar, using wheelbarrow and shovel. Applies grout between joints of installed tile, using grouting trowel. Removes excess grout from tile joints with wet sponge and scrapes corners and crevices with trowel. Wipes surface of tile after grout has set to remove grout residue and polish tile, using nonabrasive materials. Cleans installation site, mixing and storage areas, and installation machines, tools, and equipment, using water and various cleaning tools. Stores tile setting materials, machines, tools, and equipment. May apply caulk, sealers, acid, steam, or related agents to caulk, seal, or clean installed tile, using various application devices and equipment. May modify mixing, grouting, grinding, and cleaning procedures according to type of installation or material used. May assist TILE SETTER (construction) to position and secure metal lath, wire mesh, or felt paper prior to installation of tile. May cut marked tiles to size, using power saw or tile cutter.

Tile Setter - Ratio 1 Journeyman /3 Helpers

Applies tile to walls, floors, ceilings, and promenade roof decks, following design specifications: Examines blueprints, measures and marks surfaces to be covered, and lays out work. Measures and cuts metal lath to size for walls and ceilings with tin snips. Tacks lath to wall and ceiling surfaces with staple gun or hammer. Spreads plaster base over lath with trowel and levels plaster to specified thickness, using screed. Spreads concrete on sub floor, with trowel and levels it with screed. Spreads mastic or other adhesive base on roof deck, using serrated spreader to form base for promenade tile. Cuts and shapes tile with tile cutters and biters. Positions tile and taps it with trowel handle to affix tile to plaster or adhesive base.

Truck Driver

Drives truck with capacity of more than 3 tons, to transport materials to and from specified destinations: Drives truck to destination, applying knowledge of commercial driving regulations and area roads. Prepares receipts for load picked up. Collects payment for goods delivered and for delivery charges. May maintain truck log, according to state and federal regulations. May maintain telephone or radio contact with supervisor to receive delivery instructions. May load and

unload truck. May inspect truck equipment and supplies, such as tires, lights, brakes, gas, oil, and water. May perform emergency roadside repairs, such as changing tires, installing light bulbs, tire chains, and spark plugs. May position blocks and tie rope around items to secure cargo during transit.

Laborers

Common Laborer

Performs any combination of the following tasks in erecting, repairing and wrecking buildings; dig, spread and level dirt and gravel; lift carry and hold building materials, tools and supplies; clean tools, equipment, materials and work areas; mix, pour and spread concrete, asphalt, gravel and other materials; join, wrap and seal sections of pipe; routine non-machine tasks such as removing forms from set concrete, filling expansion joints with asphalt, and placing culverts in trench. May also signal construction equipment operators; measure distances from grade stakes, drive stakes and stretch lines; bolt, nail align and block up under forms; mix and finish poured concrete, erect scaffolding; spread paint or coating to seal surfaces; caulking compounds to seal surfaces; remove projections from concrete, and mount pipe hangers.

Mason Tender Brick (Bricklayer's Helper)

Mason Tender Cement (Concrete Mason's / Concrete Finisher's Helper)

Pipe layer

Lay pipe for storm or sanitation sewers, drains, and water mains. Perform any combination of the following tasks: grade trenches or culverts, position pipe, or seal joints.

Plaster Tender (Plaster's Helper)

Tends machine that pumps plaster or stucco through spray gun for application to ceilings, walls, and partitions of buildings: Starts and stops machine on signals from PLASTERER (construction). Fills hopper of machine with plaster. Turns valves to regulate pump and compressor. Assists in erecting scaffolds.

Power Equipment Operator:

Asphalt Paver (operator)

Operator; bituminous-paving-machine operator; blacktop-paver operator; blacktop spreader; mechanical-spreader operator; paving-machine operator, asphalt or bituminous. Operates machine that spreads and levels hot-mix bituminous paving material on sub grade of highways and streets: Bolts extensions to screed to adjust width, using wrenches. Lights burners to heat screed. Starts engine and controls paving machine to push dump truck and maintain constant flow of asphalt into hopper. Observes distribution of paving material along screed and controls direction of screed to eliminate voids at curbs and joints. Turns valves to regulate temperature of asphalt flowing from hopper when asphalt begins to harden on screed.

Backhoe (operator)

Operates power-driven machine, equipped with movable shovel, to excavate or move coal, dirt, rock, sand, and other materials: Receives written or oral instructions from supervisor regarding material to move or excavate. Pushes levers and depresses pedals to move machine, to lower and push shovel into stockpiled material, to lower and dig shovel into surface of ground, and to lift, swing, and dump contents of shovel into truck, car, or onto conveyor, hopper, or stockpile. Observes markings on ground, hand signals, or grade stakes to remove material, when operating machine at excavation site.

Crane (operator)

Operates electric-, diesel-, gasoline-, or steam-powered guy-derrick or stiff-leg derrick (mast supported by fixed legs or tripod), to move products, equipment, or materials to and from quarries, storage areas, and processes, or to load and unload trucks or railroad cars: Pushes and pulls levers and depresses pedals to raise, lower, and rotate boom and to raise and lower load line in response to signals.

Forklift (operator)

Drives gasoline-, liquefied gas-, or electric-powered industrial truck equipped with lifting devices, such as forklift, boom, scoop, lift beam and swivel-hook, fork-grapple, clamps, elevating platform, or trailer hitch, to push, pull, lift, stack, tier, or move products, equipment, or materials in warehouse, storage yard, or factory: Moves levers and presses pedals to drive truck and control movement of lifting apparatus. Positions forks, lifting platform, or other lifting device under, over, or around loaded pallets, skids, boxes, products, or materials or hooks tow trucks to trailer hitch, and transports load to designated area. Unloads and stacks material by raising and lowering lifting device.

Slab & Wall Saw (See Related Power Equipment Operator Above)

Use associated power equipment operators already defined.

Apprentices

Apprentices may be used in any of the crafts listed above where noted, if they are currently certified in a program recognized by the Bureau of Apprenticeship and Training, U.S. Department of Labor, providing the proper ratio between journeyman and apprentice is observed. Apprentice certification certificates must be supplied with the first weekly payroll upon which the apprentice's name appears.

Helper (65% of the journeyman classification)

(Must not exceed 3 helpers to 1 journeyman)

A Helper is a semi-skilled worker (rather than a skilled journeyman) who works under the direction of and assists a journeyman. Under the journeyman's direction and supervision, the helper performs a variety of duties to assist the journeyman such as preparing, carrying, and furnishing equipment, supplies and maintaining them in order; cleaning and preparing work areas; lifting, positioning, and holding materials or tools; and other related semi-skilled tasks as directed by the journeyman. A helper may use the tools of the trade at and under the direction of the journeyman. The particular duties performed by a helper vary according to area practice. The journeyman must work in close proximity to the location of the helpers work area. The helpers wage rate shall be calculated at no less than 65% of the prevailing wage for that journeyman's classification.

Helper who assists more than one journeyman craft should be listed with the notation indicating each journeyman craft classification they assist.

Welders - Receive rate prescribed for craft performing operation to which welding is incidental.

Pipe fitters* Apprentice Schedule (Excluding HVAC Pipe)

Journeyman	Indentured Apprentice	Apprentice Applicant	Total
1	1	0	1 to 1
3	2	1	3 to 3
5	3	2	5 to 5
8	4	3	8 to 7
12	5	4	12 to 9
16	6	5	16 to 11
20	7	6	20 to 13
25	8	7	25 to 15
30	9	8	30 to 17
40	10	9	40 to 19
50	11	10	50 to 21

NOTE: Continue after 50 Journeyman- ONE (1) Indentured Apprentice and (1) Apprentice Applicant for every ten (10) Journeyman

*When Apprentices are shown, Helpers cannot be utilized

APPRENTICES (see definitions)

Registered Apprenticeship Ratios

For All Apprentices

Apprentice duties consist but are not limited to reading blue prints, lay out, fabrication, installation, and assembly. Other duties are the setting up and operation of fabrication machines, using hand tools, power tools, lifting/handling devices, sealing if necessary according to their particular craft. Apprentices also are trained in the preparation process of a job that include but not limited to staging, planning, distribution, and sectioning of materials. Apprentices may be used in any of the crafts listed where noted on the Prevailing

Wage Rate Schedule, if they are currently certified in a program recognized by the Bureau of Apprenticeship and Training, U.S. Department of Labor, providing the proper ratio between journeyman and apprentice is observed. Apprentice certification certificates must be supplied with the first weekly payroll upon which the apprentice's name appears. Helpers or Laborers cannot be utilized when Apprentices are shown

Asbestos Worker/ Insulator

City of Houston allows the use of 1 Journeyman and 1 Apprentice, the Apprentice can be used with the first Journeyman. No other Apprentices can be added until the 2nd Journeyman is added. All Apprentices are to be under the direct supervision of a Journeyman.

1 Journeyman w/ 1 Apprentice
2 Journeymen w/ 2 Apprentices

Boilermakers

City of Houston allows the use of 5 Journeymen and 1 Apprentice, the Apprentice can be used with the first Journeyman. No other Apprentices can be added until the 6th Journeyman is added. All Apprentices are to be under the direct supervision of a Journeyman.

1-5 Journeymen w/ 1 Apprentice
6-10 Journeymen w/ 2 Apprentices

Carpenter

City of Houston allows the use of 2 Journeymen and 1 Apprentice, the Apprentice can be used with the first Journeyman. No other Apprentices can be added until the 4th Journeyman is added. All Apprentices are to be under the direct supervision of a Journeyman.

1-2 Journeymen w/ 1 Apprentice
3-4 Journeymen w/ 2 Apprentices
5-6 Journeymen w/ 3 Apprentices

Electrician

City of Houston allows the use of 3 Journeymen and 2 Apprentices, the Apprentice can be used with the first Journeyman. No other Apprentices can be added until the 3rd Journeyman is added. All Apprentices are to be under the direct supervision of a Journeyman. All Journeymen and Apprentices must hold a current license from the State of Texas.

1 Journeyman w/ 1 Apprentice
2 Journeymen w/ 1 Apprentice
3 Journeymen w/ 2 Apprentices
4 Journeymen w/ 3 Apprentices
5 Journeymen w/ 3 Apprentices

- 6 Journeymen w/ 4 Apprentices
- 7 Journeymen w/ 4 Apprentices
- 8 Journeymen w/ 4 Apprentices
- 9 Journeymen w/ 4 Apprentices
- 10 Journeymen w/ 5 Apprentices

Plumbers

City of Houston allows the use of 3 Journeymen and 2 Apprentices, the Apprentice can be used with the first Journeyman. No other Apprentices can be added until the 3rd Journeyman is added. All Apprentices are to be under the direct supervision of a Journeyman. All Journeymen and Apprentices must hold a current license from the State of Texas.

- 1 Journeyman w/ 1 Apprentice
- 2 Journeymen w/ 1 Apprentice
- 3 Journeymen w/ 2 Apprentices
- 4 Journeymen w/ 3 Apprentices
- 5 Journeymen w/ 3 Apprentices
- 6 Journeymen w/ 4 Apprentices
- 7 Journeymen w/ 4 Apprentices
- 8 Journeymen w/ 4 Apprentices
- 9 Journeymen w/ 4 Apprentices
- 10 Journeymen w/ 5 Apprentices

Sprinkler Fitter

City of Houston allows the use of 1 Journeyman and 1 Apprentice, the Apprentice can be used with the first Journeyman. No other Apprentices can be added until the 2nd Journeyman is added. All Apprentices are to be under the direct supervision of a Journeyman.

- 1 Journeyman w/ 1 Apprentice
- 2 Journeymen w/ 2 Apprentices

Sheetmetal Worker

City of Houston allows the use of 2 Journeymen and 1 Apprentice, the Apprentice can be used with the first Journeyman. No other Apprentices can be added until the 4th Journeyman is added. All Apprentices are to be under the direct supervision of a Journeyman.

- 1-2 Journeymen w/ 1 Apprentice
- 3-4 Journeymen w/ 2 Apprentices
- 5-6 Journeymen w/ 3 Apprentices

Pipefitter

City of Houston allows the use of 1 Journeymen and 1 Apprentice, the Apprentice can be used with the first Journeyman. No other Apprentices can be added until the 4th Journeyman is added. All Apprentices are to be under the direct supervision of a Journeyman.

- 1 Journeyman w/ 1 Apprentice
- 2 Journeymen w/ 1 Apprentice
- 3 Journeymen w/ 2 Apprentices
- 4 Journeymen w/ 3 Apprentices
- 5 Journeymen w/ 3 Apprentices
- 6 Journeymen w/ 4 Apprentices
- 7 Journeymen w/ 4 Apprentices
- 8 Journeymen w/ 4 Apprentices
- 9 Journeymen w/ 4 Apprentices
- 10 Journeymen w/ 5 Apprentices

HELPER (see definitions)

(Must not exceed 3 helpers to 1 journeyman)

A Helper is a semi-skilled laborer (rather than a skilled journeyman) who works under the direction of and assists a journeyman. Under the journeyman's direction and supervision, the helper performs a variety of duties to assist the journeyman such as preparing, carrying, and furnishing equipment, supplies and maintaining them in order; cleaning and preparing work areas; lifting, positioning, and holding materials or tools; and other related semi-skilled tasks as directed by the journeyman. A helper may use the tools of the trade at and under the direction of the journeyman. The particular duties performed by a helper vary according to area practice. The journeyman must work in close proximity to the location of the helpers work area. The helper's wage rate shall be calculated at no less than 65% of the prevailing wage for that journeyman's classification. Helper who assists more than one journeyman craft should be listed with the notation indicating each journeyman craft classification they assist.

Welders

Receive rate prescribed for craft performing operation in which welding is incidental

Pipefitters * Apprentice Schedule (Excluding HY AC Pipe)

NOTE: Continue after 50 Journeyman - ONE (1) Indentured Apprentice and one (1) Apprentice Applicant for every ten (10) Journeyman

Journeyman	Indentured Apprentice	Apprentice Applicant	Total
1	1	0	1 to 1
3	2	1	3 to 3
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8	4	3	8 to 7
12	5	4	12 to 9
16	6	5	16 to 11
20	7	6	20 to 13
25	8	7	25 to 15
30	9	8	30 to 17
40	10	9	40 to 19
50	11	10	50 to 21

Where Apprentices are shown, Helpers cannot be utilized

If there are questions as to the classification of a worker, contact the Contract Compliance Officer in writing with a description of the work to be performed. After review the Contract Compliance Officer will respond in writing with the classification and wage rate to be paid the worker in question.

Fringe Benefits

If the worker is not receiving fringe benefits, they must be paid in cash if noted on the prevailing wage schedule along with the base rate. The term wages means the basic hourly rate of pay; any contribution irrevocably made by a Design-Builder or subcontractor to a trustee or to a third person pursuant to a bona fide fringe benefit fund, plan, or program; and the rate of costs to the Design-Builder or subcontractor which may be reasonably anticipated in providing bona fide fringe benefits to laborers and mechanics pursuant to an enforceable commitment to carry out a financially responsible plan of program, which was communicated in writing to the laborers and mechanics affected. The fringe benefits enumerated in the Davis-Bacon Act include medical or hospital care, pensions on retirement or death, compensation for injuries or illness resulting from occupational activity, or insurance to provide any of the foregoing; unemployment benefits; life insurance, disability insurance, sickness insurance, or accident insurance; vacation or holiday pay; defraying costs of apprenticeship or other similar programs; or other bona fide fringe benefits. Fringe benefits do not include benefits required by other Federal, State, or local law. The prevailing wages (including fringe benefits) as adopted for this contract are based upon a survey performed under the Davis-Bacon Act. Thus, determinations in regard to fringe benefits, to the extent practicable, will be based upon the standards set forth in the following federal regulations.

Title 29, Code of Federal Regulations, Part 4

Labor Standards for Federal Service Contracts

(29 CFR 4.169-4.171)

29 CFR 4.170 - Furnishing fringe benefits or equivalents.

- (a) General. Fringe benefits required under the Act shall be furnished, separate from and in addition to the specified monetary wages, by the contractor or subcontractor to the employees engaged in performance of the contract, as specified in the determination of the Secretary or his authorized representative and prescribed in the contract documents. Section 2(a)(2) of the Act provides that the obligation to furnish the specified benefits "may be discharged by furnishing any equivalent combinations of fringe benefits or by making equivalent or differential payments in cash under rules and regulations established by the Secretary." The governing rules and regulations for furnishing such equivalents are set forth in Sec. 4.177 of this subpart. An employer cannot offset an amount of monetary wages paid in excess of the wages required under the determination in order to satisfy his fringe benefit obligations under the Act, and must keep appropriate records separately showing amounts paid for wages and amounts paid for fringe benefits.
- (b) Meeting the requirement, in general. The various fringe benefits listed in the Act and in Sec. 4.162(a) are illustrative of those which may be found to be prevailing for service employees in a particular locality. The benefits which an employer will be required to furnish employees performing on a particular contract will be specified in the contract documents. A Design-Builder may dispose of certain of the fringe benefit obligations which may be required by an applicable fringe benefit determination, such as pension, retirement, or health insurance, by irrevocably paying the specified contributions for fringe benefits to an independent trustee or other third person pursuant to an existing "bona fide" fund, plan, or program on behalf of employees engaged in work subject to the Act's provisions. Where such a plan or fund does not exist, a Design-Builder must discharge his obligation relating to fringe benefits by furnishing either an equivalent combination of "bona fide" fringe benefits or by making equivalent payments in cash to the employee, in accordance with the regulations in Sec. 4.177.

29 CFR 4.171 - "Bona fide" fringe benefits.

- (a) To be considered a "bona fide" fringe benefit for purposes of the Act, a fringe benefit plan, fund, or program must constitute a legally enforceable obligation, which meets the following criteria:
 - (1) The provisions of a plan, fund, or program adopted by the Design-Builder, or by contract as a result of collective bargaining, must be specified in writing, and must be communicated in writing to the affected employees. Contributions must be made pursuant to the terms of such plan, fund, or program. The plan may be either Design-Builder-financed or a joint

- contractor employee contributory plan. For example, employer contributions to Individual Retirement Accounts (IRAs) approved by IRS are permissible. However, any contributions made by employees must be voluntary, and if such contributions are made through payroll deductions, such deductions must be made in accordance with Sec. 4.168. No contribution toward fringe benefits made by the employees themselves, or fringe benefits provided from monies deducted from the employee's wages may be included or used by an employer in satisfying any part of any fringe benefit obligation under the Act.
- (2) The primary purpose of the plan must be to provide systematically for the payment of benefits to employees on account of death, disability, advanced age, retirement, illness, medical expenses, hospitalization, supplemental unemployment benefits, and the like.
 - (3) The plan must contain a definite formula for determining the amount to be contributed by the Design-Builder and a definite formula for determining the benefits for each of the employees participating in the plan.
 - (4) Except as provided in paragraph (b), the Design-Builder's contributions must be paid irrevocably to a trustee or third person pursuant to an insurance agreement, trust or other funded arrangement. The trustee must assume the usual fiduciary responsibilities imposed upon trustees by applicable law. The trust or fund must be set up in such a way that the Design-Builder will not be able to recapture any of the contributions paid in nor in any way divert the funds to its own use or benefit.
 - (5) Benefit plans or trusts of the types listed in 26 U.S.C. 401(a) which are disapproved by the Internal Revenue Service as not satisfying the requirements of section 401(a) of the Internal Revenue Code or which do not meet the requirements of the Employee Retirement Income Security Act of 1974, 29 U.S.C. 1001, et seq. and regulations thereunder, are not deemed to be "bona fide" plans for purposes of the Service Contract Act.
 - (6) It should also be noted that such plans must meet certain other criteria as set forth in Sec. 778.215 of 29 CFR part 778 in order for any contributions to be excluded from computation of the regular rate of pay for overtime purposes under the Fair Labor Standards Act (Secs. 4.180-4.182).
- (b) (1) Unfunded self-insured fringe benefit plans (other than fringe benefits such as vacations and holidays which by their nature are normally unfunded) under which Design-Builders allegedly make "out of pocket" payments to provide benefits as expenses may arise, rather than making irrevocable contributions to a trust or other funded arrangement as required under Sec. 4.171 (a)(4), are not normally considered "bona fide" plans or equivalent benefits for purposes of the Act.
- (2) A Design-Builder may request approval by the Administrator of an unfunded self-insured plan in order to allow credit for payments under the plan to meet the fringe benefit requirements of the Act. In considering whether such a plan is bona fide, the Administrator will consider such factors as whether it could be reasonably anticipated to provide the prescribed benefits, whether it represents a legally enforceable commitment to provide such benefits, whether it is carried out under a financially responsible program, and whether the plan has been communicated to the employees in writing. The Administrator in his/her discretion may direct that assets be set aside and preserved in an escrow account or that other protections be afforded to meet the plan's future obligation.
 - (c) No benefit required by any other Federal law or by any State or local law, such as unemployment compensation, workers' compensation, or social security, is a fringe benefit for purposes of the Act.
 - (d) The furnishing to an employee of board, lodging, or other facilities under the circumstances described in Sec. 4.167, the cost or value of which is creditable toward the monetary wages specified under the Act, may not be used to offset any fringe benefit obligations, as such items and facilities are not fringe benefits or equivalent benefits for purposes of the Act.

- (e) The furnishing of facilities which are primarily for the benefit or convenience of the Design-Builder or the cost of which is properly a business expense of the Design-Builder is not the furnishing of a "bona fide" fringe benefit or equivalent benefit or the payment of wages. This would be true of such items, for example, as relocation expenses, travel and transportation expenses incident to employment, incentive or suggestion awards, and recruitment bonuses, as well as tools and other materials and services incidental to the employer's performance of the contract and the carrying on of his business, and the cost of furnishing, laundering, and maintaining uniforms and/or related apparel or equipment where employees are required by the Design-Builder, by the Contract Documents, by law, or by the nature of the work to wear such items. See also Sec. 4.168.
- (f) Contributions by Design-Builders for such items as social functions or parties for employees, flowers, cards, or gifts on employee birthdays, anniversaries, etc. (sunshine funds), employee rest or recreation rooms, paid coffee breaks, magazine subscriptions, and professional association or club dues, may not be used to offset any wages or fringe benefits specified in the contract, as such items are not "bona fide" wages or fringe benefits or equivalent benefits for purposes of the Act.

Exhibit B – Certificate from Design-Builder Appointing Officer or Employee to Supervise Payment of Employees

Project Name _____

Project WBS# _____ Date _____

(I) (We) hereby certify that (I am) (we are) the Design-Builder for

(specify type of job)

In connection with construction of the above-mentioned Project, and that (I) (we) have appointed _____, whose signature appears below, to supervise the payment of (my) (our) employees beginning

_____, 20_____; that he/she is in a position to have full knowledge of the facts set forth in the payroll documents and in the statement of compliance required by the Copeland Act and the City of Houston, which he/she is to execute with (my) (our) full authority and approval until such time as (I) (we) submit to the City of Houston a new certificate appointing some other person for the purposes hereinabove stated.

Phone _____

(Identifying Signature of Appointee)

Attest: _____

(Name of Firm or Corporation)

By: _____ By: _____

(Signature)

(Signature)

(Title)

(Title)

NOTE: This certificate must be executed by an authorized officer of a corporation or by a member of a partnership, and shall be executed prior to and be submitted with the first payroll. Should the appointee be changed, a new certificate must accompany the first payroll for which the new appointee executes a statement of compliance required by the Copeland Act and the City of Houston.

Exhibit C – Certificate from Subcontractor appointing officer or employee to supervise payment of employees.

Project Name _____

Project WBS# _____ Date _____

(I) (We) herby certify that (I am) (we are) the Subcontractor for

(specify type of job)

In connection with construction of the above-mentioned Project, and that (I) (we) have appointed _____, whose signature appears below, to supervise the payment of (my) (our) employees beginning

_____, 20_____; that he/she is in a position to have full knowledge of the facts set forth in the payroll documents and in the statement of compliance required by the Copeland Act and the City of Houston, which he/she is to execute with (my) (our) full authority and approval until such time as (I) (we) submit to the City of Houston a new certificate appointing some other person for the purposes herinabove stated.

Phone _____

(Identifying Signature of Appointee)

Attest: _____

(Name of Firm or Corporation)

By: _____ By: _____

(Signature)

(Signature)

(Title)

(Title)

NOTE: This certificate must be executed by an authorized officer of a corporation or by a member of a partnership, and shall be executed prior to and be submitted with the first payroll. Should the appointee be changed, a new certificate must accompany the first payroll for which the new appointee executes a statement of compliance required by the Copeland Act and the City of Houston.

END CITY OF HOUSTON FLOWDOWN PROVISIONS

See attached COH
Health and Safety Plan

TEXAS WATER DEVELOPMENT BOARD SUPPLEMENTAL CONTRACT CONDITIONS

1.0 Supersession

The Owner, Design-Builder, and the subcontractor agree that the TWDB Supplemental Conditions apply to the work eligible for Texas Water Development Board assistance to be performed under this contract and these clauses supersede any conflicting provisions of this contract.

2.0 Privity of Contract

Funding for this project is expected to be provided in part by a loan or grant from the Texas Water Development Board. Neither the state of Texas, nor any of its departments, agencies or employees is, or will be, a party to this subcontract or any lower tier contract. This subcontract is subject to applicable provisions in 31 TAC Chapter 363 in effect on the date of the assistance award for this project.

3.0 Definitions

- (a) The term "Owner" means the local entity contracting for the construction services. For the NEWPP Expansion Project, the City of Houston and four Regional Water Authorities are the "Owner".
- (b) The term "TWDB" means the Executive Administrator of the Texas Development Water Board, or other person who may be at the time acting in the capacity or authorized to perform the functions of such Executive Administrator, or the authorized representative thereof.
- (c) The term "Engineer" means the Owner's authorized consulting engineer for the project. For the NEWPP Expansion Project, the Design-Builder performs the duties of the consulting engineer.
- (d) The term "Design-Builder" means the Houston Waterworks Team. In progressive design-build projects the Design-Builder is the Engineer and the General Contractor. Subcontractors will contract with the Design-Builder and must comply with the clauses of this contract.

4.0 Laws to be Observed

In the execution of the subcontract, the subcontractor must comply with all applicable local, state and federal laws, including but not limited to laws concerned with labor, safety, minimum wages, and the environment. The subcontractor shall be familiar with and at all times shall observe and comply with all federal, state, and local laws, ordinances and regulations which in any manner affect the conduct of the work, and shall indemnify and save harmless the Owner, Design-Builder, TWDB, and their representatives against any claim arising from violation of any such law, ordinance or regulation by the subcontractor, their lower tier subcontractor or their employees.

5.0 Review by Owner and TWDB

- (a) The Owner, authorized representatives and agents of the Owner, the Design-Builder, and the TWDB shall, at all times have access to and be permitted to observe and review all work, materials, equipment, payrolls, personnel records, employment conditions, material invoices, and other relevant data and records pertaining to this contract, provided, however that all instructions and approval with respect to the work will be given to the subcontractor only by the Owner through authorized representatives or agents.
- (b) Any such inspection or review by the TWDB shall not subject the state of Texas, or its representatives, to any action for damages.

6.0 Performance and Payment Bonds

Each subcontractor awarded a construction contract must furnish performance and payment bonds:

- (a) the performance bond shall include without limitation guarantees that work done under the contract will be completed and performed according to approved plans and specifications and in accordance with sound construction principles and practices;
- (b) the performance and payment bonds shall be in a penal sum of not less than 100 percent of the contract price and remain in effect for one year beyond the date of approval by the Design-Builder of the political subdivision; and

- (c) the subcontractor shall utilize a surety company that is authorized to do business in Texas in accordance with Surety Bonds and Related Instruments, Chapter 3503 of the Insurance Code.

7.0 Payments Schedule and Cost Breakdown

- (a) The subcontractor shall submit for approval immediately after execution of the Agreement, a carefully prepared Progress Schedule, showing the proposed dates of starting and completing each of the various sections of the work, the anticipated monthly payments to become due to the subcontractor, and the accumulated percent of progress each month.
- (b) The following paragraph applies only to contracts awarded on a lump sum contract price:

COST BREAKDOWN - The subcontractor shall submit to the Design-Builder and Owner a detailed breakdown of the estimated cost of all work to be accomplished under the contract, so arranged and itemized as to meet the approval of the Owner or funding agencies. This breakdown shall be submitted promptly after execution of the agreement and before any payment is made to the subcontractor for the work performed under the contract. After approval by the Design-Builder and Owner the unit prices established in the breakdown shall be used in estimating the amount of partial payments to be made to the subcontractor.

8.0 Workers' Compensation Insurance Coverage (as applicable, consistent with Texas Labor Code § 406.096)

- (a) The subcontractor shall certify in writing that they provide workers' compensation insurance coverage for each employee of the subcontractor employed on the public project.
- (b) Each lower tier subcontractor on the public project shall provide such a certificate relating to coverage of the lower tier subcontractor's employees to the Design-Builder, who shall provide the lower tier subcontractor's certificate to the governmental entity.
- (c) A subcontractor who has a contract that requires workers' compensation insurance coverage may provide the coverage through a group plan or other method satisfactory to the governing body of the governmental entity.
- (d) The employment of a maintenance employee by an employer who is not engaging in building or construction as the employer's primary business does not constitute engaging in building or construction.
- (e) In this section:
- (1) "Building or construction" includes:
 - i. erecting or preparing to erect a structure, including a building, bridge, roadway, public utility facility, or related appurtenance;
 - ii. remodeling, extending, repairing, or demolishing a structure; or
 - iii. otherwise improving real property or an appurtenance to real property through similar activities.
 - (2) "Governmental entity" means this state or a political subdivision of this state. The term includes a municipality.

9.0 Prevailing Wage Rates

This subcontract is subject to Government Code Chapter 2258 concerning payment of Prevailing Wage Rates. The Design-Builder and Owner will determine what the general prevailing rates are in accordance with the statute. The applicable provisions include, but are not limited to the following. **In the context of these specific Supplemental Contract Conditions, the word Contractor below refers to subcontractor and the word Subcontractor below refers to lower tier subcontractor.**

§2258.021. Right to be Paid Prevailing Wage Rates

- (a) A worker employed on a public work by or on behalf of the state or a political subdivision of the state shall be paid:
- (1) not less than the general prevailing rate of per diem wages for work of a similar character in the locality in which the work is performed; and
 - (2) not less than the general prevailing rate of per diem wages for legal holiday and overtime work.
- (b) Subsection (a) does not apply to maintenance work.
- (c) A worker is employed on a public work for the purposes of this section if the worker is employed by a

Contractor or Subcontractor in the execution of a contract for the public work with the state, a political subdivision of the state, or any officer or public body of the state or a political subdivision of the state.

§2258.023. Prevailing Wage Rates to be Paid by Contractor and Subcontractor; Penalty

- (a) The Contractor who is awarded a contract by a public body or a Subcontractor of the Contractor shall pay not less than the rates determined under Section 2258.022 to a worker employed by it in the execution of the contract.
- (b) A Contractor or Subcontractor who violates this section shall pay to the state or a political subdivision of the state on whose behalf the contract is made, \$60 for each worker employed for each calendar day or part of the day that the worker is paid less than the wage rates stipulated in the contract. A public body awarding a contract shall specify this penalty in the contract.
- (c) A Contractor or Subcontractor does not violate this section if a public body awarding a contract does not determine the prevailing wage rates and specify the rates in the contract as provided by Section 2258.022.
- (d) The public body shall use any money collected under this section to offset the costs incurred in the administration of this chapter.
- (e) A municipality is entitled to collect a penalty under this section only if the municipality has a population of more than 10,000.

§2258. 024. Records

- (a) A Contractor and Subcontractor shall keep a record showing:
 - (1) the name and occupation of each worker employed by the Contractor or Subcontractor in the construction of the public work; and
 - (2) the actual per diem wages paid to each worker.
- (b) The record shall be open at all reasonable hours to inspection by the officers and agents of the public body.

§2258. 025. Payment Greater Than Prevailing Rate Not Prohibited

This chapter does not prohibit the payment to a worker employed on a public work an amount greater than the general prevailing rate of per diem wages.

10.0 Employment of Local Labor (only applicable to projects funded by EDAP)

The subcontractor shall, to the maximum feasible extent, employ local labor for construction of the project. The subcontractor and every lower tier subcontractor undertaking to do work on the project which is, or reasonably may be done as on-site work, shall employ qualified persons who regularly reside within the political subdivision boundary of the Owner and the economically distressed area where the project is located (Texas Water Code, Section 17.183).

11.0 Payments

- (a) Progress Payments:
 - (1) The subcontractor shall prepare their requisition for progress payment as of the last day of the month and submit it, with the required number of copies, to the Design-Builder for review. Except as provided in paragraph (3) of this subsection, the amount of the payment due the subcontractor shall be determined by adding to the total value of work completed to date, the value of materials properly stored on the site and deducting: (1) five percent (5%) minimum of the total amount, as a retainage and (2) the amount of all previous payments. The total value of work completed to date shall be based on the actual or estimated quantities of work completed and on the unit prices contained in the agreement (or cost breakdown approved pursuant to section 7b relating to lump sum bids) and adjusted by approved change orders. The value of materials properly stored on the site shall be based upon the estimated quantities of such materials and the invoice prices. Copies of all invoices shall be available for inspection by the Design-Builder.

- (2) The subcontractor shall be responsible for the care and protection of all materials and work upon which payments have been made until final acceptance of such work and materials by the Owner. Such payments shall not constitute a waiver of the right of the Owner to require the fulfillment of all terms of the Contract and the delivery of all improvements embraced in this contract complete and satisfactory to the Owner in all details.
 - (3) This clause applies to contracts when the Owner is a District or Authority. The retainage shall be ten percent of the amount otherwise due until at least fifty percent of the work has been completed. After the project is fifty percent completed, and if the District or Authority's Board finds that satisfactory progress is being made, then the District may authorize any of the remaining progress payments to be made in full. The District is not obligated to pay interest earned on the first 50% of work completed (Texas Water Code Sec. 49.276(d)).
 - (4) The five percent (5%) retainage of the progress payments due to the subcontractor may not be reduced until the building of the project is substantially complete and a reduction in the retainage has been authorized by the TWDB.
- (b) Withholding Payments. The Design-Builder and Owner may withhold from any payment otherwise due the subcontractor so much as may be necessary to protect the Owner and if so elects may also withhold any amounts due from the subcontractor to any lower tier subcontractors or material dealers, for work performed or material furnished by them. The foregoing provisions shall be construed solely for the benefit of the Owner and will not require the Owner to determine or adjust any claims or disputes between the subcontractor and their lower tier subcontractors or material dealers, or to withhold any monies for their protection unless the Owner elects to do so. The failure or refusal of the Owner to withhold any monies from the subcontractor shall in no way impair the obligations of any surety or sureties under any bond or bonds furnished under this contract.
- (c) Payments Subject to Submission of Certificates. Each payment to the subcontractor by the Design-Builder and Owner shall be made subject to submission by the subcontractor of all written certifications required of the subcontractor, their lower tier subcontractors, and other general and special conditions elsewhere in this contract.
- (d) Final Payment.
 - (1) Upon satisfactory completion of the work performed under this contract, as a condition before final payment under this contract or as a termination settlement under this contract the subcontractor shall execute and deliver to the Owner a release of all claims against the Owner arising under, or by virtue of, this contract, except claims which are specifically exempted by the subcontractor to be set forth therein. Unless otherwise provided in this contract, by state law or otherwise expressly agreed to by the parties to this contract, final payment under this contract or settlement upon termination of this contract shall not constitute a waiver of the Owner's claims against the subcontractor or their sureties under this contract or applicable performance and payment bonds.
 - (2) After final inspection and acceptance by the Owner of all work under the contract, the subcontractor shall prepare their requisition for final payment which shall be based upon the carefully measured or computed quantity of each item of work at the applicable unit prices stipulated in the Agreement or cost breakdown (if lump sum), as adjusted by approved change orders. The total amount of the final payment due to the subcontractor under this contract shall be the amount computed as described above less all previous payments.
 - (3) The retainage and its interest earnings, if any, shall not be paid to the subcontractor until the TWDB has authorized a reduction in, or release of, retainage on the contract work.
 - (4) Withholding of any amount due to the Design-Builder and Owner, under general and/or special conditions regarding "Liquidated Damages" shall be deducted from the final payment due the subcontractor.

12.0 Archaeological Discoveries and Cultural Resources

No activity which may affect properties listed or properties eligible for listing in the National Register of Historic Places or eligible for designation as a State Archeological Landmark is authorized until the Owner has complied with the provisions of the National Historic Preservation Act and the Antiquities Code of Texas. The Owner has previously coordinated with the appropriate agencies and impacts to known cultural or archeological deposits have been avoided or mitigated. However, the subcontractor may encounter unanticipated cultural or archeological deposits during construction.

If archeological sites or historic structures which may qualify for designation as a State Archeological Landmark according to the criteria in 13 TAC Chapter 26, or that may be eligible for listing on the National Register of Historic Places in accordance with 36 CFR Part 800, are discovered after construction operations are begun, the subcontractor shall immediately cease operations in that particular area and notify the Owner, the TWDB, and the Texas Historical Commission, 1511 N. Colorado St. , P. O. Box 12276, Capitol Station, Austin, Texas 78711-2276. The subcontractor shall take reasonable steps to protect and preserve the discoveries until they have been inspected by the Owner's representative and the TWDB. The Owner will promptly coordinate with the State Historic Preservation Officer and any other appropriate agencies to obtain any necessary approvals or permits to enable the work to continue. The subcontractor shall not resume work in the area of the discovery until authorized to do so by the Owner.

13.0 Endangered Species

No activity is authorized that is likely to jeopardize the continued existence of a threatened or endangered species as listed or proposed for listing under the Federal Endangered Species Act (ESA), and/or the State of Texas Parks and Wildlife Code on Endangered Species, or to destroy or adversely modify the habitat of such species.

If a threatened or endangered species is encountered during construction, the subcontractor shall immediately cease work in the area of the encounter and notify the Design-Builder and Owner, who will immediately implement actions in accordance with the ESA and applicable State statutes. These actions shall include reporting the encounter to the TWDB, the U.S. Fish and Wildlife Service, and the Texas Parks and Wildlife Department, obtaining any necessary approvals or permits to enable the work to continue, or implement other mitigation actions. The subcontractor shall not resume construction in the area of the encounter until authorized to do so by the Owner.

14.0 Hazardous Materials

Materials utilized in the project shall be free of any hazardous materials, except as may be specifically provided for in the specifications.

If the subcontractor encounters existing material on sites owned or controlled by the Owner or in material sources that are suspected by visual observation or smell to contain hazardous materials, the subcontractor shall immediately notify the Design-Builder and Owner. The Owner will be responsible for the testing and removal or disposal of hazardous materials on sites owned or controlled by the Owner. The Owner may suspend the work, wholly or in part during the testing, removal or disposal of hazardous materials on sites owned or controlled by the Owner.

15.0 Changes

Provisions identified with an asterisk (*) below are consistent with Local Government Code 271.060. Counties and Municipalities may modify the identified provisions, when applicable, to conform to Local Government Code 262.031 (Counties) or 252.048 (Municipalities).

- (a) The Owner may at any time, without notice to any surety, by written order designated or indicated to be a change order, make changes in the work within the general scope of the contract, including but not limited to changes:
 - (1) In the specifications (including drawings and designs);
 - (2) In the time, method or manner of performance of the work;
 - (3) To decrease or increase the quantity of work to be performed or materials, equipment or supplies to be furnished;
- (b) *The total price of a contract may not be increased by a change order unless provision has been made

for the payment of the added cost by the appropriation of current funds or bond funds for that purpose, by the authorization of the issuance of certificates, or by a combination of those procedures.

- (c) *A contract with an original contract price of \$1 million or more may not be increased by more than 25 percent. If a change order for a contract, with an original contract price of less than \$1 million, increases the contract amount to \$1 million or more, subsequent change orders may not increase the revised contract amount by more than 25 percent.
- (d) *A governing body may grant authority to an official or employee responsible for purchasing or for administering a contract to approve a change order that involves an increase or decrease of \$50,000 or less.
- (e) Changes that involve an increase in price will be supported by documentation of the cost components. For projects funded through the EDAP program, or with grant proceeds, TWDB staff may request this information to be provided in a format equivalent to the Cost and Pricing Information form (No. WRD-277).
- (f) Any change orders involving a change in the project requiring a relocation of project components, sizing, or process may require additional environmental approval. A map and description of the proposed changes should be sent to the TWDB Environmental Reviewer for coordination and approval as soon as possible to avoid any delay.

16.0 Operation and Maintenance Manuals and Training

- (a) The subcontractor shall obtain installation, operation, and maintenance manuals from manufacturers and suppliers for equipment furnished under the contract. The subcontractor shall submit three copies of each complete manual to the Design-Builder within 90 days after approval of shop drawings, product data, and samples, and not later than the date of shipment of each item of equipment to the project site or storage location.
- (b) The Owner shall require the Design-Builder to promptly review each manual submitted, noting necessary corrections and revisions. If the Design-Builder rejects the manual, the subcontractor shall correct and resubmit the manual until it is acceptable to the Design-Builder as being in conformance with the design concept of the project and for compliance with information given in the contract documents. Design-Builder may assess subcontractor a charge for reviews of same items in excess of two (2) times. Such procedure shall not be considered cause for delay.
- (c) Acceptance of manuals by Design-Builder does not relieve subcontractor of any requirements of terms of contract.
- (d) The subcontractor shall provide the services of trained, qualified technicians to check final equipment installation, to assist as required in placing same in operation, and to instruct operating personnel in the proper manner of performing routine operation and maintenance of the equipment.
- (e) Operations and maintenance manuals specified hereinafter are in addition to any operation, maintenance, or installation instructions required by the subcontractor to install, test, and start-up the equipment.
- (f) Each manual is to be bound in a folder and labeled to identify the contents and project to which it applies. The manual shall contain the following applicable items:
 - (1) A listing of the manufacturer's identification, including order number, model, serial number, and location of parts and service centers.
 - (2) A list of recommended stock of parts, including part number and quantity.
 - (3) Complete replacement parts list.
 - (4) Performance data and rating tables.
 - (5) Specific instructions for installation, operation, adjustment, and maintenance.
 - (6) Exploded view drawings for major equipment items.
 - (7) Lubrication requirements.
 - (8) Complete equipment wiring diagrams and control schematics with terminal identification.

17.0 As-built Dimensions and Drawings

- (a) Subcontractor shall make appropriate daily measurements of facilities constructed and keep accurate records of location (horizontal and vertical) of all facilities.
- (b) Upon completion of each facility, the subcontractor shall furnish the Design-Builder and Owner with one set of direct prints, marked with red pencil, to show as-built dimensions and locations of all work constructed. As a minimum, the final drawings shall include the following:
 - (1) Horizontal and vertical locations of work.
 - (2) Changes in equipment and dimensions due to substitutions.
 - (3) "Nameplate" data on all installed equipment.
 - (4) Deletions, additions, and changes to scope of work.
 - (5) Any other changes made.

18.0 Close-Out Procedures

To close-out the contract and release final retainage, the following steps must be completed:

- (a) TWDB Staff must conduct a construction contract final inspection (CCFI).
- (b) The following submittals must be received, reviewed, and accepted by TWDB:
 - (1) The final change order, adjustment of quantities, or a statement that all change orders have previously been submitted and there will be no more change orders;
 - (2) The final pay request from the subcontractor;
 - (3) An affidavit by the subcontractor that all bills have been paid;
 - (4) Certification by the Design-Builder that the work has been completed and was constructed in accordance with the approved plans and specifications and sound engineering principles and construction practices;
 - (5) Acceptance of the project by the Owner in the form of a written resolution or other formal action;
 - (6) Notification of the beginning date of the warranty period for the contract; and
 - (7) Confirmation that the Owner has received as-built drawings from the subcontractor.
- (c) TWDB will issue a Certificate of Approval allowing the release of retainage.

TEXAS DEVELOPMENT WATER BOARD SUPPLEMENTAL INSTRUCTIONS TO BIDDERS

This contract is funded in part through state programs administered by the Texas Water Development Board. In addition to any other instructions, bidders shall abide with the following Supplemental Instructions, as required by the Texas Development Water Board, in preparing their bids:

Contingent Award of Contract

This contract is contingent upon release of funds from the Texas Development Water Board. Any contract or contracts awarded under this Invitation for Bids is/are expected to be funded in part by a loan or grant from the Texas Development Water Board. Neither the state of Texas, nor any of its departments, agencies, or employees are or will be a party to this Invitation for Bids or any resulting contract.

Bid Guarantee

Each bidder shall furnish a bid guarantee equivalent to five percent of the bid price (Water Code §17.183). If a bid bond is provided, the subcontractor shall utilize a surety company which is authorized to do business in Texas in accordance with Surety Bonds and Related Instruments, Chapter 3503 of the Insurance Code.

Award of Contract to Nonresident Bidder

A governmental entity may not award a governmental contract to a nonresident bidder unless the nonresident underbids the lowest bid submitted by a responsible resident bidder by an amount that is not less than the amount by which a resident bidder would be required to underbid the nonresident bidder to obtain a comparable contract in the state in which the nonresident's principal place of business is located. A non-resident bidder is a subcontractor whose corporate offices or principal place of business is outside of the state of Texas (Source: Texas Government Code, Chapter 2252, Subchapter A, Nonresident Bidders, §2252.002).

The bidder will complete form TWDB-0459, Vendor Compliance with Reciprocity on Non-Resident Bidders, **which must be submitted with the bid.**

Texas Water Boards Forms and Guidance List

The following documents, mentioned throughout this guidance are available on the TWDB website at: <http://www.TWDB.texas.gov/financial/instructions/index.asp>

Forms:

The following forms must be included in the subcontractor's bid documents:

- TWDB-0459, Vendor Compliance with Reciprocity of Non-Resident Bidders.
- Site Certificate (ED-101)
- Contractor's Act of Assurance (ED-103)
- Contractor's Act of Assurance Resolution (ED-104)

Vendor Compliance with Reciprocity on Non-Resident Bidders, TWDB-0459

Government Code 2252.002 provides that, in order to be awarded a contract as a low bidder, a non-resident bidder must bid projects for construction, improvements, supplies or services in Texas at an amount lower than the lowest Texas resident bidder, by the same amount that a Texas resident bidder would be required to underbid a non-resident bidder in order to obtain a comparable contract in the state in which the non-resident's principal place of business is located. A non-resident bidder is a contractor whose corporate offices or principal place of business is outside the state of Texas. This requirement does not apply to a contract involving Federal funds. The appropriate blanks in Section A must be filled out by all out-of-state and non-resident bidders in order for your bid to meet specifications. The failure of out-of-state or non-resident bidders in order for your bid to meet specifications. The failure of out-of-state or non-resident contractors to do so will automatically disqualify that bidder. Resident bidders must check the blank in Section B.

A. Non-resident vendors in _____ (give state), our principal place of business, are required to be _____ percent lower than resident bidders by state law.

A copy of the statute is attached.

Non-resident vendors in _____ (give state), our principal place of business, we are not required to underbid resident bidders.

B . Our principal place of business or corporate offices are in the State of Texas:

BIDDER:

Company

City, State Zip

By: (please print)

Signature

Title (please print)

THIS FORM MUST BE RETURNED WITH BID

I hereby certify that is was RESOLVED by a quorum of the directors of the

(Name of Corporation),

Meeting this Day of 20 That:

Authorized Representatives (s):

Be, and by herby is/are authorized to act on behalf of

(Name of Corporation), as its representative in all business transactions conducted in the State of Texas, and;

That all above resolution was unanimously ratified by the Board of Directors at said Meeting and that the resolution has not been rescinded or amended and is now in full forces and Effect, and:

The authentication of the adoption of this resolution, I subscribe by name and affix the seal

of the Corporation, this Day of 20

(Secretary)

[SEAL]

THIS FORM MUST BE RETURNED WITH BID

Bidder's Statement of MWBE/PDBE/DBE/SBE Status

This certifies that the status of the Bidder,

(Bidder's Name)

In regard to the City of Houston Code of Ordinances, Chapter 15, Article V, relating to City-wide percentage goals for contracting with Minority and Women-owned Business Enterprises (MWBE) and Disadvantaged Business Enterprises (DBE), Chapter 15, Article VI, relating to City-wide percentage goals for contracting with Persons with Disabilities Business Enterprises (PDBE) and Chapter 15, Article IV, relating to City-wide percentage goals for contracting with a Small Business Enterprise (SBE) is as follows:

1. Bidder (individual, partnership, corporation) is (___) is not (___) a Minority Business Enterprise as certified by the Affirmative Action and Contract Compliance Division.
2. Bidder (individual, partnership, corporation) is (___) is not (___) a Woman-owned Business Enterprise as certified by the Affirmative Action and Contract Compliance Division.
3. Bidder (individual, partnership, corporation) does (___) does not (___) declare Itself to be a Persons with Disabilities Business Enterprise as defined above.
4. Bidder (individual, partnership, corporation) does (___) does not (___) declare itself to be a Disadvantaged Business Enterprise as defined above.
5. Bidder (individual, partnership, corporation) does (___) does not (___) declare Itself to be a Small Business Enterprise as defined above.

Signature:

Title:

Date:

THIS FORM MUST BE RETURNED WITH BID

00450-1
03-09-2007

Document 00470

Bidder's MWSBE Participation Plan

The Bidder or Proposer shall submit this completed form with the bid, to demonstrate the Bidder/Proposer's plan to meet the contract-specific MWSBE goal(s) ("contract goal(s)"). If the Bidder or Proposer cannot meet the contract goal(s), the Bidder/Proposer has the burden to demonstrate "Good Faith Efforts", which shall include correctly and accurately preparing and submitting this form, a Record of Good Faith Efforts (Document 00471), a Request for Deviation from the Goal (Document 00472), and providing supporting documentation evidencing their "Good Faith Efforts", as required by the City of Houston's Good Faith Efforts Policy (Document 00808). The City will review the Participation Plan and Good Faith Efforts at the time of bid opening. Visit <http://www.houstontx.gov/obo> for more information.

City Contract Goal	MBE	WBE	<ul style="list-style-type: none"> • MBE and WBE Goals are two separate Contract Goals. • Any excess of one Goal cannot be applied to meet another Goal. • An SBE can be applied to the MBE and/or WBE Goal, but not to exceed 4%. • Only up to 50% of the Bidder's Participation plan may be met using Suppliers.
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NAICS Code (6 digit)	Description of Work (Plan Sheet #, Unit Price #, Scope of Work #, as applicable)	% of Total Bid Price (2 decimal places, Example: 5.00 %)	Services or Supplier	Cert. Type for Goal: MBE, WBE, or SBE	Certified Firm Name Firm Address Contact Name Phone No. and E-Mail
				MBE <input type="checkbox"/> WBE <input type="checkbox"/> SBE <input type="checkbox"/>	
				MBE <input type="checkbox"/> WBE <input type="checkbox"/> SBE <input type="checkbox"/>	
				MBE <input type="checkbox"/> WBE <input type="checkbox"/> SBE <input type="checkbox"/>	
				MBE <input type="checkbox"/> WBE <input type="checkbox"/> SBE <input type="checkbox"/>	
				MBE <input type="checkbox"/> WBE <input type="checkbox"/> SBE <input type="checkbox"/>	
				MBE <input type="checkbox"/> WBE <input type="checkbox"/> SBE <input type="checkbox"/>	
				MBE <input type="checkbox"/> WBE <input type="checkbox"/> SBE <input type="checkbox"/>	

Bidder's Participation Plan Total	MBE	WBE	SBE

Signature for Company: _____ *

Printed Name: _____

Company Name: _____

Phone #: _____

Date: _____

*I understand that supplying inaccurate information may violate Texas Penal Code Section 37.10 and lead to City sanctions.

00470-1
01-20-2017

<<Bidder or Proposer Name>>

THIS FORM MUST BE RETURNED WITH BID

Pay or Play Program Acknowledgement Form

Form POP- 1



**City of Houston
Pay or Play Program
Acknowledgement Form**



It has been determined that the project currently open for bidding meets the criteria of the City of Houston Pay or Play Program. This form acknowledges your awareness of the Pay or play program which is authorized by Ordinance 2007-534. Your signature below affirms that you will comply with the requirements of the program if you are the successful bidder/proposer, and ensure the same on behalf of subcontracts subject to the Pay or Play Program.

I declare under penalty of perjury under the laws of the State of Texas that if awarded this Contract which meets the criteria for the City of Houston's Pay or Play Program, I will comply with all requirements of the Play or Play Program in Accordance with Executive Order 1-7

*Fill out all information below and submit this form with your bid/proposal packet.

Solicitation Number	
Signature	Date
Print Name	City Vendor ID
Company Name	Phone Number
Email Address	

Note: For more information contact your POP Liaison or the POP Contract Administrator. All contact information can be found on www.houstontx.gov ➡ Departments ➡ Office of Business Opportunity ➡ Pay or Play

Document 00460

OBO 7/3/201

THIS FORM MUST BE RETURNED WITH BID

Site Certificate – ED-101

STATE OF TEXAS

§

COUNTY OF Harris

§

§

**SITE
CERTIFICATE**

Before me, the undersigned notary, on this day personally appeared
Ravi Kaleyatodi, a person whose identity is
 known to me or who has presented to me a satisfactory proof of identity. After I administered an
 oath, this person swore to the following:

(1) My name is Ravi Kaleyatodi. I am over 18 years of age and
 I am of sound mind, and capable of swearing to the facts contained in this Site Certificate. The
 facts stated in this certificate are within my personal knowledge and are true and correct.

(2) I am an authorized representative of City of Houston,
 an entity that has filed an application for financial assistance with the Texas Water Development
 Board for a (water) (wastewater) project.

Please complete only those sections that apply to your project:

LEGAL CERTIFICATION – LEASE/CONTRACT

I certify that: City of Houston
 (Legal Name of Applicant, i.e., City, District, etc.)

has executed a written lease or other contractual agreement to use the property needed for this
 (water)(wastewater) project that extends through _____ (date),
 the life of the Texas Water Development Board loan or grant that will be used to finance this
 project, either in whole or in part. A copy of this lease or agreement is attached hereto.

LEGAL CERTIFICATION – PROPERTY EASEMENT

I certify that: City of Houston
 (Legal Name of Applicant, i.e., City, District, etc.)

has executed an express easement to use the property needed for this (water) (wastewater)
 project that extends through the life of the Texas Water Development Board loan or grant that
 will be used to finance this project, either in whole or in part. The express easement to use the
 property needed for this (water) (wastewater) project extends through _____ (date).
 A copy of the express easement agreement is attached hereto.

ED-101
 Rev 9/16

LEGAL CERTIFICATION – OWNERSHIP INTEREST

I certify that City of Houston

(Legal Name of Applicant, e.g. City, District, etc.)

☒ Option A: has acquired the necessary real property interest, as evidenced by fee simple purchase, deed, fully executed earnest money contracts, or completion of eminent domain proceedings; that such acquisition will guarantee access and egress; and such interest will contain the necessary easements, rights of way, or unrestricted use as is required for the project being financed by the Texas Water Development Board. The legal description is referenced below.

☐ Option B: is in the process of acquiring the necessary real property interest, as evidenced by earnest money contracts, contracts for sale, firm option agreements to purchase the subject property, or the initiation of eminent domain procedures; that such acquisition will guarantee access and egress; and such interest will contain the necessary easements, rights of way, or unrestricted use as is required for the project being financed by the Texas Water Development Board. The legal description is referenced below. The anticipated date of acquisition is:
n/a.

The property has been/will be acquired with the use of eminent domain: ☐ True ☒ False

Location and Description of Property Interests acquired for Project:

Any deeds or other instruments required to be recorded to protect the title(s) held by _____ (Legal Name of Applicant)
have been recorded or filed for the record in the County deed records or other required location.
The following documents are attached hereto:

Description of documents that were used or will be used to acquire the property:

EXECUTED this 28th day of JULY, 20 17.

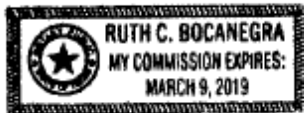
Ravi Kaleyatoot (Signature)

RAVI KALEYATOOT (Print Name)

ACTING PROJECT DIRECTOR (Title)

Sworn to and subscribed before me by RAVI KALEYATOOT on this 28th day
of July, 20 17.

Ruth C. Bocanegra (Notary Public in and for the State of Texas)



[SEAL]

PROVIDED BY THE CITY OF HOUSTON

Exhibit A - Scope of work

1.0 The Project

Northeast Water Purification Plant
12630 Waterworks Blvd
Humble, TX 77396

2.0 The Construction Execution Plan

- 2.1 The project shall be constructed on the basis of HOUSTON WATERWORKS TEAM managing multiple Subcontractors to accomplish all of the work required to complete the Project. Materials and equipment to be supplied by Subcontractor including consumable materials used in construction and those materials specifically identified to be supplied by Subcontractor. Subcontractor shall be required to share common temporary facilities and complete their Work working in cooperation with other Subcontractors employed at the same location and during the same period of time.
- 2.2 Lower Tier Subcontractors are required to be approved by HOUSTON WATERWORKS TEAM and successfully participate in the Safety Orientation prior to the Lower Tier Subcontractor entering the Project Site.

3.0 Completion of Work

- 3.1 Subcontractor shall complete the Work as described in Attachment A-3-1, Detailed Scope of Work and shall provide the support functions required to effectively manage and report on the status of the Work as specified in this Subcontract.
- 3.2 Subcontractor shall provide all management, supervision, labor, consumable materials, construction equipment, construction aids, tools, services, warehousing, supplies, insurance, fully furnished and equipped offices, communication devices, and all other necessary items to successfully accomplish the construction described by the Scope of Work. This includes, but is not limited to, on and off- site transportation, receiving, unloading, storing, maintenance, and distribution of construction materials, installation of such materials into the Work, proper care of materials while in the custody of the Subcontractor, and testing and final construction punch-list completion and turnover of the Work as specified.
- 3.3 Substantial Completion shall be achieved for all, or a specified portion of the Work, when the Work, or specified portion thereof, have been completed in accordance with the applicable Substantial Completion Checklist.

Subcontractor shall notify HOUSTON WATERWORKS TEAM that it considers Substantial Completion or of the Work to have been achieved. HOUSTON WATERWORKS TEAM within seven (7) calendar days of receipt of Subcontractor's notification shall notify Subcontractor of the deficiencies that must be corrected before the certificate of Substantial Completion shall be issued. Deficiencies shall be identified on a "Punch List" as "A" or "B" items. "A" Items are

required to be completely resolved with “B” items of minor importance to the operation of the facilities and maybe completed within an agreed upon time frame and payment of the final invoice shall not be paid without all items and associated documentation being complete. Upon correction of all “A” items, Subcontractor shall again notify HOUSTON WATERWORKS TEAM that it considers Substantial Completion complete. When all “A” items are indeed complete and HOUSTON WATERWORKS TEAM and Owner agree shall been achieved, HOUSTON WATERWORKS TEAM shall issue a Substantial Completion Certificate to Subcontractor.

- 3.4 Upon issue of a Substantial Completion Certificate HOUSTON WATERWORKS TEAM and OWNER shall assume care, custody, and control of the Work, or specified portion thereof, and proceed with commissioning and start-up operations.
- 3.5 HOUSTON WATERWORKS TEAM and OWNER shall, at all times, have the right to take possession of portions of the Work, before Substantial Completion, and use for any purpose any partially completed portion of the Work. HOUSTON WATERWORKS TEAM will issue a Notification that indicates intended date and portions of the Work subject to early possession.
- 3.6 HOUSTON WATERWORKS TEAM and Owner taking possession to use any partially completed portion of Work shall not be deemed to be acknowledgement of completion and acceptance of said portion of Work and shall not relieve Subcontractor of its obligation to complete such portion of the Work and correct any deficiencies therein, and shall not limit or waive Subcontractor's responsibility under this Subcontract.
- 3.7 When all punch-list items and commissioning and start up have been completed, then HOUSTON WATERWORKS TEAM shall either issue a Certificate of Final Completion of the Work, or, notify Subcontractor of deficiencies that must be corrected before such certificate shall be issued. Provided that, if for reasons beyond the reasonable control of Subcontractor, start-up has not occurred and the Work has not so demonstrated within twelve (12) months after the date of Substantial Completion, then HOUSTON WATERWORKS TEAM shall be obligated to issue a Certificate of Final Completion.
- 3.8 Neither the issuance of a Substantial Completion Certificate nor the making of final payment shall constitute a waiver of any of HOUSTON WATERWORKS TEAM's rights to claims against Subcontractor under the terms of this Agreement including, but not limited to, those arising from:
 - (i) Unsettled liens or other claims by third parties brought against HOUSTON WATERWORKS TEAM or Owner, or
 - (ii) Faulty or defective Work, or
 - (iii) Failure of the Work to comply with the requirements of the Agreement, or
 - (iv) Terms of any guarantees or warranties required by the Agreement.
- 3.9 No decision, action, payment, acceptance, or failure to act on the part of HOUSTON WATERWORKS TEAM shall be, or, imply a waiver of any right HOUSTON WATERWORKS TEAM may have under the terms of this Subcontract with respect to defects in the Work.

4.0 Management and Supervision of the Work

- 4.1 Subcontractor shall provide experienced and competent management personnel to properly supervise, coordinate, and support the construction effort. Resumes for Subcontractor's key personnel shall be submitted for approval by HOUSTON WATERWORKS TEAM prior to Subcontractor's mobilization. Key personnel shall not be replaced or removed from the Project Site without the written concurrence of HOUSTON WATERWORKS TEAM. The Subcontractors authorized representative or a nominated deputy, acceptable to HOUSTON WATERWORKS TEAM, shall be on the Project Site at all times Work is being performed. Subcontractor is responsible for having adequate management and supervision on site to execute the Work in accordance with the agreed upon schedule. Subcontractor shall supplement management and supervision immediately if the Work falls behind the agreed upon schedule at Subcontractors expense.
- 4.2 Subcontractor authorized representatives shall attend and participate with the appropriate staff in all meetings with HOUSTON WATERWORKS TEAM to review and discuss aspects of the Work including but not limited to Subcontract Kick Off Meeting, Weekly Progress Meeting, Construction Coordination Meetings, Safety Meetings, Quality Meetings and others as required to review and resolve ongoing issues that may arise during the execution of the Work. Subcontractor may be required to chair and be responsible for the meeting records at such meetings.

5.0 Construction Labor

- 5.1 Subcontractor is required to provide qualified personnel to execute the Work in accordance with the requirements of this Subcontract and shall control the movement of its personnel and observe all rules and regulations while on the Project Site. Subcontractor shall be responsible for obtaining and maintaining all formalities necessary for its personnel to legally work for the duration of this Agreement. Subcontractor shall also be responsible for the training of its personnel and for assuring that its personnel have the required trade qualifications to meet with the requirements of this Subcontract. Subcontractor shall supplement construction labor immediately if the Work falls behind the agreed upon schedule at Subcontractors expense.

6.0 Construction Equipment

- 6.1 Subcontractor shall mobilize all the necessary construction equipment to undertake the Work and shall be responsible for the temporary importation of that equipment onto the Project Site. Subcontractor shall be responsible for meeting the entry requirements for equipment, and the safe operation, security, insurance, testing, certification, maintenance, repair, fire protection, fueling and oiling of that equipment. Equipment brought onto the Project Site shall be used exclusively for the execution of the Work unless agreed otherwise by HOUSTON WATERWORKS TEAM. Subcontractor shall supplement its Construction Equipment to support the required progress immediately if the work falls behind the agreed upon schedule at Subcontractors expense.
- 6.2 Subcontractor's equipment shall be subject to inspection at the time of entering the Project Site and periodically thereafter by HOUSTON WATERWORKS TEAM. Any Subcontractor's equipment that is rejected by HOUSTON WATERWORKS TEAM as not conforming to National, State or Local requirements, manufacturer's specifications, or, site requirements shall be promptly repaired or replaced with

equipment acceptable to HOUSTON WATERWORKS TEAM without additional cost to HOUSTON WATERWORKS TEAM and without delay to the schedule.

- 6.3 Subcontractor's construction equipment shall be properly sized to safety and efficiently handle the intended Work tasks. Equipment shall be properly maintained and be free of leaks of oils or fuels onto the ground. Subcontractor shall immediately report, clean and properly dispose of any fuels or lubricants spilled on to the Project Site.
- 6.4 Construction Equipment used by Subcontractor's shall not exceed any prevailing laws or Owner requirements limiting the size, weight, and use of said equipment. Where the laws or requirements are not specific, HOUSTON WATERWORKS TEAM's Representative shall have complete authority to limit the size, movements, and operations of said equipment.
- 6.5 The type of equipment and the dates on which they are brought onto or removed from the Project Site shall be coordinated with and is subject to prior approval by HOUSTON WATERWORKS TEAM.
- 6.6 A Lifting or Rigging Plan shall be submitted to the HOUSTON WATERWORKS TEAM for approval for all lifts exceeding eighty percent (80%) of the rated chart capacity of the proposed equipment and for all lifts in excess of twenty (20) tons. Subcontractor's crews shall carefully execute such lifts in strict accordance with the approved Lifting Plan. The Lifting Plan shall include description of hoisting equipment and rigging hardware, gross loads, and safety margin at maximum radius.
- 6.7 All rigging equipment and materials shall be accompanied by appropriate tags, documentation and certification stating its capacity and fitness for duty. Rigging equipment and materials shall be inspected in accordance with OSHA minimum requirements.
- 6.8 Equipment operators shall be properly licensed and certified to operate equipment. This includes operators of hydraulic man-lifts, forklifts, and other general craft operated equipment.

7.0 Temporary Facilities

- 7.1 Subcontractor shall be responsible for the mobilization, installation, and maintenance of its temporary facilities as detailed by the following table. Subcontractor shall demobilize its temporary facilities upon completion of its Work and restore the site to its "as received" condition. Installation of temporary facilities shall be coordinated with, and approved by, HOUSTON WATERWORKS TEAM. Exhibit I: Project Work Rules and Site Requirements provide details of the site.

Refer to Responsibilities table – Attachment A-3-1 Detailed Scope of work pages.

8.0 Materials Furnished by Houston Waterworks Team

- 8.1 HOUSTON WATERWORKS TEAM reserves the right to furnish Subcontractor with all or any portion of the materials, supplies, special tools, or equipment on a no-charge basis. Subcontractor agrees that mark-ups shall not be applicable to any items furnished by HOUSTON WATERWORKS TEAM or for any Work performed by HOUSTON WATERWORKS TEAM. Scope of Work Attachment A-8-1, Materials and or Equipment Supplied by HOUSTON WATERWORKS TEAM identifies all Materials and or Equipment to be supplied to Subcontractor on a free

issue basis and required to be installed into the Work. Subcontractor shall provide and install all other materials and equipment required to complete the Work described and specified in this Subcontract.

- 8.2 Subcontractor shall plan its work in advance and as required by its schedule and shall notify HOUSTON WATERWORKS TEAM of any lack of materials and equipment to be supplied by HOUSTON WATERWORKS TEAM in sufficient time for HOUSTON WATERWORKS TEAM to furnish the identified materials, or, equipment to support Subcontractor's Work. Subcontractor shall inspect all material and equipment as it arrives on site to ensure any defective materials and/or equipment are identified before they are required to be installed and time is available to correct the defect(s) Subcontractor shall promptly notify HOUSTON WATERWORKS TEAM of any defects found. A thirty day "look ahead" review is intended to identify any such shortage or defect that may affect the efficient execution of the Work. Subcontractor agrees to implement "work around programs" (avoiding unproductive standby time) when defective materials or equipment may cause a delay or misfits. Subcontractor agrees to maintain progress of Work pending correction of such misfit or the furnishing of materials or equipment.

9.0 Material Management

- 9.1 Subcontractor shall conform to the requirements of Exhibit H: Site Material Control which shall as a minimum provide for the following requirements.
- 9.2 Subcontractor is responsible for receiving, conducting receipt inspection, offloading and loading, storage and distribution of various materials and equipment delivered to the Project for the Scope of Work defined in this Subcontract. Subcontractor shall take care, custody and control of Subcontractor and HOUSTON WATERWORKS TEAM supplied materials and equipment from the time Subcontractor takes possession by off-loading the same from third party transport. Subcontractor remains totally responsible for the materials and equipment stored, or, installed through to the completion and hand over of the Work.
- 9.3 The delivery and acceptance of all such materials and equipment shall be recorded in writing and where applicable maintained by the Subcontractor. Subcontractor shall furnish Material Receiving Reports (MRRs); and, in the case of overages, shortages, or shipment damage, shall prepare Over, Short, and Damaged reports (OS&D) for HOUSTON WATERWORKS TEAM supplied materials. MRRs shall be issued within twenty-four (24) hours of receipt of materials. OS&Ds shall accompany MRRs where applicable. Damaged materials shall be immediately reported to HOUSTON WATERWORKS TEAM's onsite Area Superintendent
- 9.4 All materials shall be properly supported off the ground and out of mud and water. Dunnage or other means of support shall be provided by Subcontractor at its expense.
- 9.5 Lay-down areas shall be laid out on a grid and materials shall be cataloged to the storage area grid to effect ease of retrieval.
- 9.6 Subcontractor shall be solely responsible for preventative maintenance all items in accordance with the manufacturer instructions until completion and handover of the Work to HOUSTON WATERWORKS TEAM.

- 9.7 Subcontractor shall be responsible for the repair or replacement of any item damaged by Subcontractor without any cost or schedule impact to HOUSTON WATERWORKS TEAM until transfer of care custody and control of the Work to HOUSTON WATERWORKS TEAM.
- 9.8 No project materials or equipment shall be taken off the Project Site unless Subcontractor has written approval issued by HOUSTON WATERWORKS TEAM to do so.

10.0 Safety

- 10.1 Safety in the workplace is HOUSTON WATERWORKS TEAM's primary initiative. Subcontractor understands that HOUSTON WATERWORKS TEAM shall take all steps necessary to assure an accident free workplace including the removal of personnel, visits request for meetings with Subcontractor's senior management, and any other means deemed necessary to assure the full implementation of a proactive and effective safety program. At all times that Subcontractor's employees or agents are on Owner's or HOUSTON WATERWORKS TEAM's premises, Subcontractor shall be solely responsible for providing them with a safe place of employment. Subcontractor shall inspect the places where its employees or agents are or may be present on Owner's or HOUSTON WATERWORKS TEAM's premises and shall promptly take action to correct conditions which are, or may become, an unsafe place of employment for them.
- 10.2 Subcontractor shall Work in full compliance with the safety practices and procedures referred to in Exhibit G: Health, Safety, and Environmental. Subcontractor is required to submit its Safety Manual and Project Site Specific Safety Plan to HOUSTON WATERWORKS TEAM for review and approval prior to mobilization onto the Project Site in accordance with Exhibit G.
- 10.3 Subcontractor shall conform to all plant safety requirements including smoking restrictions, Work permits, access limitations and other safety requirements.
- 10.4 Subcontractor shall comply with all applicable safety regulations and rules during the construction of the plant. Subcontractor acknowledges that it is aware of and has received of a copy of the safety regulations and rules.
- 10.5 Subcontractor's Work area is subject to inspection by HOUSTON WATERWORKS TEAM's safety inspectors and other management personnel. Subcontractor shall correct any safety deficiencies immediately upon notification by HOUSTON WATERWORKS TEAM. HOUSTON WATERWORKS TEAM's personnel shall have the right to require immediate cessation of Work in the case of imminent danger to life or property.
- 10.6 Subcontractor shall insure that Subcontractor's personnel entering the Project Site meet the required safety requirements and procedures that include but are not limited to the following
 - 10.6.1 Have attended a Site Safety Orientation course and/or Area Safety Council Course where necessary.
 - 10.6.2 Have the appropriate personnel protection equipment and clothing as identified in the Safety Requirements including but not limited to safety hat, safety shoes and safety glasses

- 10.6.3 Have the appropriate pass and be identifiable as Subcontractor's employees
- 10.6.4 Accidents, injuries and illnesses requiring medical attention other than first aid, damage to property of HOUSTON WATERWORKS TEAM, Owner and Subcontractor, and fires shall be reported orally to HOUSTON WATERWORKS TEAM at the time of the incident. Written reports, satisfactory in form and content to HOUSTON WATERWORKS TEAM, shall be submitted by Subcontractor within twenty-four hours after each incident including Near Misses.
- 10.6.5 Subcontractor shall maintain, in form and content approved by HOUSTON WATERWORKS TEAM, Project Site accident, injury, illness and near miss statistics, which shall be available for inspection by, and submitted to HOUSTON WATERWORKS TEAM upon its written request.

11.0 Clean-up and Housekeeping

- 11.1 Subcontractor shall clean up its Work area on a continuous basis. Subcontractor shall dispose of all trash, unwanted surplus materials, debris, and the like, as directed by HOUSTON WATERWORKS TEAM. Subcontractor's work area shall be maintained in a broom clean condition.
- 11.2 No burning or dumping shall be permitted on Owner's property. Subcontractor shall at all times, keep the site and the adjoining premises including the lay-down areas and prefabrication areas and roads free of debris, unwanted construction materials and rubbish caused by the Work, and, immediately at the completion of the individual parts of the Work, or, earlier termination of the Subcontract, Subcontractor shall remove all materials from and about the premises and shall leave the Project Site safe, clean and ready for use.
- 11.3 Upon completion of the Work, Subcontractor shall remove its own equipment, temporary buildings, utility distribution lines, tools, scaffolding, excess materials and debris from the Project Site, and, shall repair any Work or Project property that may have been damaged during the execution of the Work or demobilization from the Project Site.
- 11.4 If Subcontractor fails to comply with the provisions of this section, HOUSTON WATERWORKS TEAM is entitled to carry out such Work at Subcontractor's risk and expense.
- 11.5 HOUSTON WATERWORKS TEAM shall have the right to withhold progress payments from Subcontractor should Subcontractor fail properly implement an acceptable housekeeping program.
- 11.6 If Subcontractor is providing transport of non-hazardous solid waste, trash or debris from the Project Site, no commingling of waste shall occur during transport from other sources and sites, other than HOUSTON WATERWORKS TEAM/Owner and its affiliates, without the written consent of HOUSTON WATERWORKS TEAM/Owner.

12.0 Hazardous Waste

- 12.1 All solid and liquid wastes, and hazardous substances and materials introduced or generated by Subcontractor (including but not limited to paints, solvents, cleaners, fuels, lubricants, waste oils, construction/demolition wastes, etc.) during the performance of the Work shall be managed and disposed of by Subcontractor in full compliance with all applicable laws, statutes, regulations, ordinances, and rules. Subcontractor shall immediately report all spills, leaks and reportable releases to HOUSTON WATERWORKS TEAM in writing. Any such spill, leak or release shall be handled and disposed of properly. In the event of any question in this regard, Subcontractor shall confer with HOUSTON WATERWORKS TEAM's Construction Manager/Area Superintendent. Subcontractor shall maintain on site, Material Safety Data Sheet documentation of all hazardous substances and materials introduced or generated by Subcontractor and shall communicate said documentation with Subcontractor's supervision, craft workers, and employees prior to handling said substances or materials.
- 12.2 Under no circumstances shall hazardous wastes be commingled with non-hazardous wastes.
- 12.3 If Subcontractor encounters hazardous or unknown materials during its performance of the Work, Subcontractor shall immediately cease work and report the discovery of such materials to HOUSTON WATERWORKS TEAM's Construction Manager/Area Superintendent for resolution.
- 12.4 Subcontractor shall not accumulate, store, transport, treat, recycle, reuse or dispose of any hazardous waste, radiological waste or industrial waste of any kind belonging to HOUSTON WATERWORKS TEAM/Owner unless HOUSTON WATERWORKS TEAM/Owner and Subcontractor agree to the terms of a separate written waste management agreement for such purposes, which has been executed by authorized representatives of all parties.

13.0 Subcontractor's Interface

- 13.1 The Work shall be executed and programmed in such a manner to cause as little interruption to existing operating systems, or, other subcontractor's as possible. Any planned interruptions by Subcontractor to existing operating systems or construction access shall be reviewed with HOUSTON WATERWORKS TEAM and Owner before proceeding. HOUSTON WATERWORKS TEAM and Owner shall be informed immediately about any imminent or actual interruption of operating systems. HOUSTON WATERWORKS TEAM approval shall be required for the construction of any and all temporary lines required to provide uninterrupted service for operating systems. Operating systems are defined as water, power, sewer, process, product and/or by-product lines.

14.0 Documentation and Document Control

- 14.1 Subcontractor shall maintain a drawing and specification control program to ensure construction in accordance with the latest drawing revision. The drawing control program shall also include drawing records, shop drawings, and detail

drawings required for this Work. Subcontractor's drawings are subject to review by HOUSTON WATERWORKS TEAM.

- 14.2 Subcontractor shall keep current records of all the Work performed, including but not limited to; material certification, craftsman qualifications, test results, quality control records, quantity progress, "red lined as built" documentation, etc. Such information shall be collated and reproduced in a format acceptable to HOUSTON WATERWORKS TEAM.
- 14.3 Subcontractor shall prepare and effect procedures to assure compliance with requirements and timing laid out in Section 21 of this Scope of Work Deliverable Documents which describes but does not limit the documents to be supplied by Subcontractor to complete the Work.

15.0 As-Built Drawings

- 15.1 Where necessary, "Issued for Construction" (IFC) drawings shall be marked up (redlined) to reflect "as-built" conditions where changes in vertical and horizontal location dimensions, types, substitutions, and so forth have been made by Subcontractor. As-built drawings shall be used to confirm quantities installed that are either not defined by IFC drawings or are the subject of approved changes to IFC drawings made in the field. The "As-Built Record" of IFC drawings and specifications shall be updated monthly and may be reviewed by HOUSTON WATERWORKS TEAM prior to payment of monthly progress invoice. Payment of monthly progress payment is contingent upon "As-Built" drawings being submitted for review by HOUSTON WATERWORKS TEAM confirming the record set is current.
- 15.2 Within fourteen (14) calendar days after completion of Work, one (1) set of "As-Built" reproducible drawings shall be marked and signed by the authorized Subcontractor's Representative as testimony of validity and presented to HOUSTON WATERWORKS TEAM's Resident Construction Manager, or its designated representative.

16.0 Survey's and Layout

- 16.1 Subcontractor shall provide all surveying and field layout required to perform the Work provided by HOUSTON WATERWORKS TEAM. Subcontractor shall verify monument location. If disturbed or damaged by the Subcontractor, the Subcontractor will be responsible for the costs of repair or replacement.
- 16.2 Subcontractor shall check the installation of interfacing Work by others for accuracy prior to the start of its construction. Discrepancies shall be called to the attention of the HOUSTON WATERWORKS TEAM in writing. Claims for any rework due to such discrepancies in Work furnished by others shall not be considered if such prior notification is not provided.

17.0 Quality

- 17.1 Quality is also of primary importance to HOUSTON WATERWORKS TEAM. Subcontractor shall provide quality management team in the field to assure that its Work is in full conformance to drawings, specifications, codes, and Subcontract requirements.

- 17.2 Subcontractor shall meet the requirements of Exhibit F: Quality Assurance /Quality Control in executing its Work. Subcontractor is required to submit its Project Site Specific Quality Control Plan for review and approval by HOUSTON WATERWORKS TEAM prior to mobilization onto the site per Exhibit G: Health, Safety and Environmental.
- 17.3 Subcontractor shall be totally responsible for quality control of its Work. HOUSTON WATERWORKS TEAM will provide inspection services in conjunction with the Subcontractor's Quality Manager to establish conformance with the Contract Documents. In addition to the requirements of Exhibit F: Quality Assurance /Quality Control, Subcontractor shall ensure installation is in compliance with all aspects of the Specifications and Drawings and that materials and workmanship meet or exceed the applicable material standards contained therein. Subcontractor shall be responsible for ensuring a quality installation, free of defects, errors and omissions.
- 17.4 Subcontractor shall provide full-time Quality Manager for contracts in excess of ten million dollars as outlined in the Contract Documents.
- 17.5 Subcontractor shall expediently coordinate inspections of the Work by third party inspectors including inspectors retained by HOUSTON WATERWORKS TEAM or Subcontractor.
- 17.6 Subcontractor shall provide access to its Work for inspection by HOUSTON WATERWORKS TEAM. HOUSTON WATERWORKS TEAM's inspections shall be performed expediently. Such access shall meet the requirements of OSHA safety standards.
- 17.7 Subcontractor shall expediently coordinate testing by third (3rd) party Testing Laboratory.

18.0 Site Conditions

- 18.1 Subcontractor shall verify all field dimensions as required to ensure proper fit up of all its Work.
- 18.2 Subcontractor shall provide site drainage and dewatering of its Work area during the construction period.
- 18.3 Subcontractor is to be aware of the ground water table and its effect on any excavations required to be made by Subcontractor in conjunction with completing its Work. Costs for dewatering of excavations due to ground water shall be included in Subcontractor's price for the Work.
- 18.4 Demolition required to prepare the Project Site shall be accomplished by Subcontractor or Others. The site shall be prepared to a level condition as indicated on the drawings for beginning of construction by HOUSTON WATERWORKS TEAM.
- 18.5 The lay-down area and area for construction facilities shall be cleared. Grading shall be maintained in its original "as received" condition by Subcontractor.

- 18.3 Any evidence, or, indication of Artifacts, Burial Grounds or Historical features shall be brought to the immediate attention of HOUSTON WATERWORKS TEAM and Work will be suspended until instructed to proceed by HOUSTON WATERWORKS TEAM.

19.0 Access and Haul Roads

- 19.1 Subcontractor shall be responsible for determining Work area accessibility by examination of key drawings, plot plans, schedule and Project Site observation. Subcontractor's participation in the overall Project could entail working through and around open ditches, stored materials and other obstructions. Subcontractor shall not impede or block the free flow of traffic on arterial roads at the Project Site without the expressed permission of the HOUSTON WATERWORKS TEAM's Representative.
- 19.2 HOUSTON WATERWORKS TEAM's Representative shall identify construction access roads within the Project Site area. These roads shall be existing roads or roads that HOUSTON WATERWORKS TEAM or Subcontractor shall provide to accommodate the Work.
- 19.3 Subcontractor shall construct and maintain including dust abatement its temporary access and haul roads as necessary and required for the Work, including special access ways and grades needed to accommodate Subcontractor's erection equipment and trucks delivering materials to Subcontractor. HOUSTON WATERWORKS TEAM's Representative must approve the location of all temporary and haul roads before Subcontractor starts construction of these roads.

20.0 Rework

- 20.1 Subcontractor shall organize its Work and workers in such a manner that when the installation of materials such as, structural steel, pipe spools or other voluminous materials being installed and are found not to fit, the crafts involved in such installation shall have other work on hand on which they can continue to work. Subcontractor shall be responsible for determining the cause of the misfit and for obtaining HOUSTON WATERWORKS TEAM's approval prior to performing any rework.
- 20.2 Subcontractor shall maintain, and have available for HOUSTON WATERWORKS TEAM's review, a marked set of drawings indicating what modifications were approved and what additional Work was involved in making the modifications.
- 20.3 Subcontractor's rework required due to failure to meet specification, drawings, etc. shall be to Subcontractor's account; however, extra Work required correcting fabrication Work by others, or, material damaged by others in transit shall be reimbursed in accordance with Exhibit C: Pricing, Payment and Change Management. It is Subcontractor's responsibility to report material damaged by others to HOUSTON WATERWORKS TEAM's Construction Manager.

21.0 Deliverable Documents

- 21.1 Subcontractor shall provide but not limited to the documentation specified herein in an electronic format and reproducible form to HOUSTON WATERWORKS TEAM as part of the Work including but not limited to:

Document	Due Date or Calendar Days
Insurance Certificates	Prior to Mobilization
Payment and Performance Bonds	Prior to Mobilization
Health and Safety Plan (HASP)	Ten Days after Award and Prior to Mobilizing
Mobilization Plan	Ten Days after Award and Prior to Mobilization
Construction Execution Plan	Twenty Days after Award
Quality Control Program	30 days after Notice to Proceed
Resource Loaded Level 3 P6 Schedule	Fifteen Days after Award
Project Controls Procedure	Ten Days after Award
Resource Loaded Level 4 P6 Schedule	Thirty Days after Award
Welder Qualifications	Twenty Days after Award
Welding Procedures	Twenty Days after Award
Craftsmen Qualifications	Twenty Days after Award
Repair Procedures	Two Days before Repair is to be made
Material Certification	Upon Receipt at site and with Turnover packages
Construction Equipment Certification	Upon Mobilization to the Project Site
Rigging Plans	Ten Days before Lift Date
As Built Drawings	Within 14 days of the Work being completed
System Turnover Packages	Prior to Mechanical Acceptance
Assignment of Material and Equipment Warranties	Prior to Completion

- 21.2 Subcontractor shall submit four (4) reproducible sets of all Subcontractor supplied Drawings, calculations and welding procedures. Subcontractor shall supply one (1) original and three (3) copies of all material reports and any other data required. Subcontractor shall provide within fourteen (14) calendar days after each applicable item of Work is completed one (1) set of "as-built" reproducible drawings marked and signed by the authorized Subcontractor Representative as testimony of validity and shall be presented to the HOUSTON WATERWORKS TEAM Construction Manager, or its designated representative. (If required, provide deliverable using Bentley Microstation version xxxx.)
- 21.3 Subcontractor's performance of its obligations hereunder shall not be deemed complete until HOUSTON WATERWORKS TEAM is in receipt, in proper format, of all technical data, drawings, and other documents to be submitted to HOUSTON WATERWORKS TEAM as part of Subcontractor's Scope of Work. Failure of Subcontractor to comply with the above data shall not prejudice any other remedies of HOUSTON WATERWORKS TEAM. Subcontractor shall

show the Agreement Number and identifying item numbers, if applicable, on all data submitted pursuant to the above data item.

22.0 Time of Performance

- 22.1 Subcontractor agrees to commence the Work promptly when directed by HOUSTON WATERWORKS TEAM and to execute the Work diligently to completion in accordance with the schedule shown in Exhibit D: Schedule. Subcontractor shall provide the resources required to complete the Work in accordance with the agreed completion date. Subcontractor shall at all times have adequate number and types of management, supervision, technicians, craftsmen, laborers, construction equipment, construction aids, material and consumable supplies to complete and maintain the Work in accordance with the agreed upon schedule. Subcontractor agrees to provide schedules, including manpower and resource loading, for the performance of the Work within fifteen (15) calendar days after executing this Subcontract, and, shall revise and update the Project Schedule as required during the construction period to reflect the current situation of the Work as required by Exhibit E: Project Controls.
- 22.2 The Projects normal working hours shall 7:00 a.m. to 5:30 p.m., Monday through Friday. Saturdays shall be used as make up days for week days not worked due to the weather or other circumstances. Subcontractor shall coordinate any special requirements outside of normal working hours with the HOUSTON WATERWORKS TEAM to ensure site access. For Work requiring inspection and testing outside of normal hours, on weekends, or holidays, Subcontractor shall provide written notice to HOUSTON WATERWORKS TEAM 48 hours in advance. Subcontractor shall acknowledge request for overtime work by HOUSTON WATERWORKS TEAM inspection and testing staff and costs incurred for inspection and testing services will be deducted from Subcontractor's payment application **unless overtime work is performed as a make-up day**. All deliveries of Subcontractor's materials and equipment shall be made during normal working hours Monday thru Thursday and Fridays by 3:00 p.m.
- 22.3 Time is of the essence therefore during the performance of the Work Subcontractor shall make whatever adjustments in the working hours; manpower, equipment etc. deemed necessary by HOUSTON WATERWORKS TEAM to maintain the schedule agreed with Subcontractor. No overtime shall be worked without the prior written approval of HOUSTON WATERWORKS TEAM.
- 22.4 HOUSTON WATERWORKS TEAM may terminate this Agreement, for default, at any time in accordance with Article 11 of the Subcontract General Terms and Conditions. Such notice of termination shall be made in writing and delivered to Subcontractor's offices.
- 22.5 Work schedules shall be prepared and maintained by a qualified and experienced scheduler approved by HOUSTON WATERWORKS TEAM.
- 22.6 Liquidated Damages as described in Special Conditions Article **1.26** shall be apply.

23.0 Lower Tier Subcontractors

- 23.1 No part of the Work may be subcontracted without the prior written approval of HOUSTON WATERWORKS TEAM, and any subcontracting with such approval shall not limit or affect the obligations of the Subcontractor with regard to the Work subcontracted. Any work subcontracted by the Subcontractor, with the approval of HOUSTON WATERWORKS TEAM, shall as a minimum, be subject to the same terms, conditions and requirements as laid out in this Subcontract.
- 23.2 A list of the approved Lower Tier Subcontractors shall be included in Attachment A-23-1, Lower Tier Subcontractors stating name, and description of the work to be undertaken.
- 23.3 All Lower Tier Subcontractors staff and workers are required to attend, and where required pass, all Safety Orientation and Training requirements prior to entering the Work site.
- 23.4 Lower Tier Subcontractor's site representative shall attend progress, and coordination meetings when invited to do so.

END OF EXHIBIT A – SCOPE OF WORK

Attachment A-3-1 Detailed Scope of Work

PREFACE

The intent of this Subcontract is that the Subcontractor will be responsible for all work required, per the Subcontract documents, to construct features for the Northeast Water Purification Plant Expansion. Subcontractor shall be responsible to perform all work in accordance with the Issued for Construction Document.

The Raw Water Pipeline Subcontractor's Scope of Work (SOW) shall include, but not limited to, shoring, dewatering, tunneling and furnish and installation of dual 108-inch raw water (RW) transmission pipelines.

Subcontractor shall maintain COH access between existing plant and pump station.

The above is intended to be general in nature and is herewith further described in the below Detailed Scope of Work

1.0 DETAILED SCOPE OF WORK

- 1.1 The Scope of services for **Early Work Package 4 Raw Water Pipelines**; shall include, but not be limited to, furnishing and installing approximately 10,200 linear feet of 108" steel raw water transmission lines from just west of the shore of Lake Houston (Station 156+00) to the limits of the new plant location Station (100+00) including tunneling and borings to cross under West Lake Houston Parkway per the Contract Documents. Subcontractor shall include utility locates and potholing for any potential existing utilities not identified in the Contract Documents and relocate any identified utilities that may interfere with the pipeline. Raw Water Transmission shall include, but not be limited to, installation of a shoring system to protect the existing 66-inch RW transmission main.

Tunneling Phase I: Phase I will include the South tunnel segment (STA. 129+30 to 132+90) including installation of the 108" within the tunnel, all shoring for entry and exit shafts for the 108" south raw water pipeline and ancillary borings for power, fiber optic, and chemical lines.

The north raw water pipeline will be constructed in Phase II once the existing 66-inch Raw Water pipeline is transitioned to the new single 108-inch for the first 80MGD. The transmission main will pass under West Lake Houston Parkway per the Contract Documents.

The subcontractor's work includes, but is not limited to supervision, submittals, material procurement, labor, equipment, survey layout, quality control, supplies, consumables, permits, protection of existing utilities and improvements, and coordination with the Contractor and other Subcontractors. Subcontractor is responsible to familiarize themselves with the project site, and the plans and specifications contained in the Contract Documents. Subcontractor shall note that the requirements for quality of construction will be strictly enforced and specific performance of all Plan and Specifications provisions including dimensions and tolerance requirements. Work included under this Bid Package includes but is not limited to the following:

1.2 Specific Scope Inclusions.

- 1.2.1 General Conditions - shall include all general conditions' pay items for EWP 4.
- 1.2.2 Mobilize and demobilize all equipment, materials and personnel to the site. Subcontractor is responsible for delivery and storage of materials necessary to execute the work. Subcontractor is responsible for staging material and providing protection as necessary.
- 1.2.3 Provide Traffic Control including Off-Duty Police to direct traffic for the duration of the project per Harris County, City of Houston, State of Texas, and contract documents.
- 1.2.4 Site vehicular access is to be maintained at West Lake Houston Parkway and from the main plant site, existing raw water corridor access road is to be replaced by a new temporary access road to be built along the alignment of the existing road by transmission subcontractor. Install construction access across W. Lake Houston Parkway per the Contract Documents.

- 1.2.5 Subcontractor to provide all layout and construction staking for their scope of work using the established control points and benchmarks by HWT. Layout and construction staking shall conform to project requirements for coordinate system.
- 1.2.6 Clear and Grub - all work associated within construction limits of work zone, in compliance with the project SWPPP, inclusive of erosion control, hauling, and maintenance.
- 1.2.7 Furnish and install approximately 10,200 linear feet of dual 108-inch steel pipe per the Contract Documents. Furnish fabrication of pipe and field fabrication per the Contract Documents including field welding, polyurethane coating, and grouting.
- 1.2.8 Furnish and install three 30-inch borings using steel casing for Chlorine Dioxide, 480V Power, Fiber Optic, and 12.47KV Power.
- 1.2.9 Provide all excavation, backfilling and compaction including controlled low strength material (CLSM) and cement stabilized sand.
- 1.2.10 Furnish and install Access precast Manways including extra depth manholes and mechanical piping and appurtenances. Furnish and install air and vacuum valves including mechanical piping and appurtenances.
- 1.2.11 Provide and install Utility Corridor improvements including new temporary road construction and site drainage with culvert sections to Jack's Ditch with headwalls and rip rap outfall per the flood control details. Remove existing storm drain pipe and headwalls and dispose. Furnish and install all required stormwater manholes and pipe.
- 1.2.12 Subcontractor will be required to engineer, design and install shoring for excavation and trench safety as required, based on the means and methods of the Subcontractor. Shoring and bracing shall be signed and stamped by a Texas Licensed Professional Engineer. Subcontractor to protect existing 66-inch RW and TW transmission main.
- 1.2.13 Furnish all equipment and materials for the installation of the Phase I Tunnel and Liner Plate including entry and exit shafts.
- 1.2.14 Furnish, install and maintain dewatering controls and systems per Contract Documents.
- 1.2.15 Pressure test pipe per the specifications. Subcontractor is responsible for any temporary caps or plugs required to accomplish the test. Makeup water shall be measured with a pump and flowmeter system.
- 1.2.16 Contract includes two each off-duty peace officers as flaggers (one for each side of the four-lane highway) who will utilize two-way communication to stop traffic as needed during the entire duration of construction. Each peace officer/flagger will meet all qualifications of 01555, 1.05.
- 1.2.17 A combination of sumps and submersible pumps utilizing a wet bottom excavation grade (12-inch crushed stone and filler fabric below pipe as shown on Dwg No. 162-C-50012) and dewatering wells as specifically detailed in Section 1 of Barnard's Proposal.
- 1.2.18 Soldier piles retaining wall with internal bracing to be used for pipe trench excavation.
- 1.2.19 Bank run sand with less than 15% passing the No. 200 sieve will be used as CLSM sand.
- 1.2.20 Polyurethane, 25 mils DFT, coating on the buried piping in accordance with AWWA
- 1.2.21 Uncoated steel liner plate to be used for the tunnel.
- 1.2.22 Manual breasting of the tunnel face using steel or wood breast plates as needed.
- 1.2.23 Dual 108-inch RW pipelines to be installed with 3-ft. spacing between the pipes and between the pipe and shoring where height of cover is <15'; and 5-ft. spacing between the pipes with 4.5-ft. spacing between the pipe and shoring where height of cover is >15'.

2.0 GENERAL REQUIREMENTS

- 2.1 This is a Public Works Project and is subject to Prevailing Wage Rates and Certified Payrolls. Refer to Prime Contract Exhibit P for additional information, in Attachment 2 Subcontract LF1 - 5 Special Conditions.
- 2.2 Provide submittals, samples, and catalog cut sheets for materials to be provided within this scope of work as required by the specifications.
- 2.3 Initiate Call Before You Dig (Texas 811) before breaking ground to locate utilities on the site. Work areas are within the property of the Client and may not be serviced by Texas 811. Subcontractor is responsible for all costs associated with Utility locates by third parties.
- 2.4 Subcontractor will be responsible for complying with the project Storm Water Pollution Prevention Plan as it pertains to their work.
- 2.5 Subcontractor acknowledges that multiple mobilizations may be required for the execution of this project. The Subcontractor also agrees to work with the Contractor to comply with the overall project schedule.
- 2.6 Maintain adequate insurance per the subcontract agreement requirements during the period of work activities and warranty period. Certificates of Insurance shall be submitted upon issuance of a Subcontract.
- 2.7 Provide Payment and Performance Bond within 10 business days of the execution of the Subcontract.
- 2.8 Maintain a clean work area. All debris and tools to be picked up at the end of the day and placed in HWT provided dumpsters and Subcontractor tool boxes, respectively.
- 2.9 Subcontractor is expected to maintain good housekeeping practices with its workforces and keep their work areas neat and orderly. Pick up and dispose garbage and debris generated from their work into the HWT provided onsite dumpsters. Only job related trash is allowed in the dumpsters.
- 2.10 Subcontractor to ensure dirt track-out onto public streets is kept to a minimum. The Subcontractor shall verify that truck and equipment tires are not caked with dirt and mud prior to entering traveled roadways and shall promptly take remedial action as directed by HWT.
- 2.11 Subcontractor is required to submit a site-specific Health and Safety Plan (HASP) to HWT for review at least two weeks prior to mobilization. The Subcontractor HASP shall require at least the level of safety identified in the HWT HASP. Subcontractor will ensure that all its onsite employees and agents will wear standard personal protective equipment consisting of hardhat, safety glasses, gloves, steel toe boots, and bright colored shirt or vest with reflective striping. Subcontractor shall follow HWT health and safety program and Excellence in Safety Program (ESP) requirements. Noncompliance with these requirements will not be tolerated.
- 2.12 Subcontractor is responsible for developing and processing all their Activity Hazard Analysis (AHA) reports and submitting them to the HWT Site Health & Safety Officer (SHSO) for review two weeks prior to the commencement of any Definable Feature of Work (DFOW).
- 2.13 Subcontractor is responsible for quality control of their work and shall perform quality control inspection and quality surveillance of all work as required by this Contract. Subcontractor shall submit a Site-Specific Quality Control Plan and Work Plans for each definable segment of work included under this Contract. Subcontractor shall attend meetings for the Three Phases of Control identified in the Construction Quality Control Plan. Subcontractor shall submit documentation of Quality Control inspections daily to HWT. Subcontractor shall provide timely notification and access as required for special inspection, as required by the Contract Documents. Subcontractors shall note that Contract requirements for quality of construction shall be strictly enforced and specific performance of all Specification provisions will be required.
- 2.14 Subcontractor to adhere to and support all requirements of the Construction Quality Control Plan and special inspections requirements. Subcontractor is to provide requests for inspection a minimum of 2 days in advance of the inspection date.
- 2.15 Subcontractor is responsible for coordination with the Testing Laboratory and scheduling of required material testing and welding inspections. Subcontractor shall keep the Contractor informed of testing requirements at the daily meeting. Soil tests require 24-hour notice and welding inspections require 48 hours of notice.

- 2.16 Equipment operators shall be properly trained, licensed and/or certified to operate equipment. This includes operators of excavators, backhoes, loaders, forklifts, cranes and other general craft operated equipment.
- 2.17 Subcontractor to provide hoisting and off-loading of materials delivered to support their work.
- 2.18 Subcontractor shall mobilize all the necessary construction equipment to undertake the Work and shall be responsible for the temporary importation of that equipment onto the Project Site. Subcontractor shall be responsible for meeting the entry requirements for equipment, and the safe operation, security, insurance, testing, certification, maintenance, repair, fire protection, fueling and oiling of that equipment. Equipment brought onto the Project Site shall be used exclusively for the execution of the Work unless agreed otherwise by HWT. Subcontractor shall supplement its construction equipment to support the required progress immediately if the work falls behind the agreed upon schedule at Subcontractors expense.
- 2.19 Subcontractor's equipment may be subject to inspection at the time of entering the Project Site and periodically thereafter at HWT's sole discretion. Any Subcontractor equipment that is found by HWT as non-conforming to National, State or Local requirements, manufacturer's specifications, or site requirements shall be promptly repaired or replaced with equipment acceptable to HWT without additional cost to HWT and without delay to the schedule.
- 2.20 Subcontractor's construction equipment shall be properly sized to safety and efficiently handle the intended Work tasks. Equipment shall be properly maintained and be free of leaks of oils or fuels onto the ground. Subcontractor shall immediately report, clean and properly dispose of, to an authorized offsite location, any fuels or lubricants spilled on to the Project Site, including but not limited to any contaminated soil because of any spills.
- 2.21 Construction equipment used by Subcontractor shall not exceed any prevailing laws or Owner requirements limiting the size, weight, and use of said equipment. Where the laws or requirements are not specific, HWT's Representative shall have complete authority to limit the size, movements, and operations of said equipment.
- 2.22 Subcontractor shall use Ultra-Low Sulfur Diesel Fuel in all diesel operating vehicles and motorized equipment utilized in performing the Work. Ultra-Low Sulfur Diesel Fuel is defined as diesel fuel having 15 ppm or the applicable standard set by state or federal law rules and regulations of the Texas Commission on Environmental Quality, or the Environmental Protection Agency, whichever is less, in sulfur content. Subcontractor shall provide, upon request by HWT proof that Subcontractor and all other related entities are using Ultra Low Sulfur Diesel Fuel for off-road vehicles/equipment.
- 2.23 SWPPP required Best Management Practices (BMPs) to be in place prior to any excavation. BMPs will be installed by Others, coordination is the responsibility of Subcontractor.
- 2.24 Protect and repair any SWPPP BMP installations from damage by Subcontractor's actions.
- 2.25 Subcontractor to provide and maintain temporary barricades around excavations as necessary to comply with applicable codes and regulations during their work.
- 2.26 All work to be in accordance with the project specifications, contract drawings, and regulatory agencies.
- 2.27 At completion of the work, Subcontractor to coordinate turnover of the work with the HWT site Superintendent prior to demobilizing from the site.
- 2.28 Provide shelter and break/lunch area for crew in approved areas. Include drinking water/ice for crew. Location to be approved by HWT.
- 2.29 Provide superintendent's daily report to HWT by 10 AM the following work day.
- 2.30 Superintendent to attend weekly progress meeting with HWT and provide a current 3-week look-ahead schedule two days prior to each progress meeting.
- 2.31 Superintendent shall attend HWT's superintendent's early morning daily coordination meeting, when working on site.
- 2.32 Subcontractor shall be responsible for the mobilization, installation, and maintenance of its temporary facilities as detailed by the following table. Subcontractor shall demobilize its temporary facilities upon

completion of its Work and restore the site to its “as received” condition. Installation of temporary facilities shall be coordinated with, and approved by, HWT.

ITEM	DESCRIPTION	BY HWT		BY SC	COMMENTS
		NO COST TO SC	AT COST TO SC	AT SC'S COST	
1	Temporary Buildings				
A	Office Trailers			X	Trailers to be in reasonable condition
B	Change Houses			X	
C	Fabrication Shops			X	
D	Other (list)			X	
2	Lifting Equipment				
A	Cranes at Jobsite			X	
B	Cranes at Offsite Areas			X	
C	Hydraulic cranes at Jobsite			X	
D	Hydraulic cranes Offsite Areas			X	
E	Material Hoists/forklifts			X	
F	Elevators			X	
G	Special Rigging			X	
F	Overhead Cranes			X	
3	Rail Siding				
A	At Jobsite			X	
B	At Offsite Areas			X	
4	Erection Equipment				
A	Scaffolding and Ladders			X	
B	Welding Machines			X	
C	Air Compressors			X	
D	Weld Gases			X	
E	Other (incl. Tools and Consumables)			X	
5	Temporary Power				
A	Utility Power				NA
B	Sources (Work area - 150' radius)			X	Generators
C	110/220v/100a to SC Office at the Existing Pump Station	X			Supplied at single source for distribution by Subcontractor.
D	Other			X	
6	Water (at single point)				
A	Construction Water	X			Supplied at a single source for distribution by Subcontractor

ITEM	DESCRIPTION	BY HWT		BY SC	COMMENTS
		NO COST TO SC	AT COST TO SC	AT SC'S COST	
	(Potable and Non-Potable)				
B	Drinking Water			X	
C	Ice, Cooling, Dispensers, Cups			X	
D	For Pipe Hydro-Testing	X			From Fire Water system – distribution by Subcontractor.
7	Lighting				
A	General Area Lighting			X	As required
B	SC Work Areas (specific)			X	
C	Other			X	
8	First Aid Services				
A	Ambulance			X	
B	First Aid Service			X	
9	Sanitary Facilities				
A	Chemical Toilets (serviced)	X			Limited to porta-johns provided by HWT
B	At specific points for SC			X	
C	Holding Tanks	X			Subcontractor responsible for connection to HWT provided tanks.
10	Waste Disposal				
A	Furnish Dumpsters and Trash Removal	X ⁽¹⁾			
B	General Clean up			X	Subcontractor's Work Area.
C	Clean-up of SC Waste			X	
D	Disposal of SC generated Hazardous Waste			X	Must be coordinated with HWT and Owner.
E	Removal of Existing Hazardous Waste	X ⁽²⁾			
11	Parking (Plant Site)				
A	Office Parking Lot	X			
B	Craft Parking Lot	X			
C	Bussing from Off-site Parking			X	
12	Roads and Access				
A	General access / improvements			X	
B	Special Haul Roads			X	With Approval from HWT Construction Manager
C	Temporary convenience access			X	

ITEM	DESCRIPTION	BY HWT		BY SC	COMMENTS
		NO COST TO SC	AT COST TO SC	AT SC'S COST	
13	Storage Facilities				
A	Lay-down Areas			X	SC to be aware of site conditions and space limitations.
B	Staging Areas			X	
C	Offsite Storage/Warehouse			X	
D	Tool Cribs			X	
E	Other (list)			X	
14	Temporary Heating				
A	Temp Heating			X	
B	Temp Heating Fuel			X	
15	Food Service				
A	Food Service				Catering trucks will not be allowed on any of the project sites.
16	Security				
A	Security	X		X	Refer to Exhibit I for additional Information. (Attachment 2, Subcontract, LF1-24)
17	Other				
A	Fire retardant clothing			X	As required by HASP Plans.
B	PPE, Safety Shoes, etc.			X	
C	Office supplies & equip.			X	

Notes: (1) Dumpsters located in general areas on the Project Site shall be furnished by HOUSTON WATERWORKS TEAM for project use. No hazardous materials shall be disposed of in dumpsters. (2) Owner shall be responsible for removal of existing hazardous waste. Subcontractor shall immediately report its own hazardous waste spills and/or discovery of any hazardous waste during the execution of the Work.

3.0 SPECIFIC EXCLUSIONS

- 3.1 Access Road Reconstruction will be handled after completion of Phase 2 Tunnel, Pipeline, and the Electrical Ductbank (EWP 3) along the Raw Water corridor.
- 3.2 Subcontractor shall exclude all costs for permitting, except those which are required to be obtained by the licensed installing Subcontractor.
- 3.3 Electrical, Instrumentation, and Controls will be done by Others.
- 3.4 Electrical work required for complete Cathodic Protection will be done by Others.
- 3.5 Portable Toilets (to be provided by HWT).
- 3.6 Dumpsters (to be provided by HWT).
- 3.7 Sales tax on permanently incorporated materials – a sales tax exempt certificate will be provided. The Owner is tax exempt.

- 3.8 A Certified Industrial Hygienist (CIH) is not included in this scope as required by Specification 01351-13 Part 3.3.A.
- 3.9 Installation or maintenance of BMP as may be required by the SWPPP are not included.
- 3.10 Any costs for water treatment and sampling for stormwater and groundwater discharge as it is not clear from the bid documents if this will be required and to what degree. We plan discharge all stormwater and groundwater to Jack's Ditch and will utilize BMPs provided by others prior to discharge.
- 3.11 Per Specification Section 02511, 3.06 C 10.b. Barnard did not include the cost for performing weld acceptance tests on welded joints. Barnard understands this will be provided by HWT and will work with HWT's weld inspector to accommodate this testing.
- 3.12 Costs associated with Specification Section 02321 Cement Stabilized Sand.
- 3.13 Uncovering, handling, or hauling of any existing contaminated or hazardous materials in our proposal.
- 3.14 Not used
- 3.15 Removal of Barnard's temporary access road from STA 100+00 to STA 159+84 following the completion of construction for EWP #4.

4.0 REQUIREMENTS TO COMPLETE THE WORK

- 4.1 Substantial Completion
- 4.2 Final Subcontract Acceptance

END OF ATTACHMENT A-3-1 DETAILED SCOPE OF WORK

[illegible]

Attachment A-23-1 – Lower Tier Subcontractors – Need to provide

All Lower-Tier Subcontractors are required to be approved by HOUSTON WATERWORKS TEAM prior to entering the Project Site

Subcontractor remains responsible for the Work and the conduct of its Lower Tier Subcontractors. Lower Tier Subcontractors are required to be contracted to Subcontractor, using as a minimum, the same Subcontract requirements (Back to Back) specified in this Subcontract.

Lower Tier Subcontractors	Scope of Work

Exhibit B – Technical Documents

1.0 Technical Documents

1.1	The following drawings, specifications and other documents and the requirements described therein compliment and further define the Scope of Work described in Exhibit A, and are therefore, made a part of the requirements of this Subcontract.
1.2	Furthermore, any document referenced in the following drawings, specifications and other documents are also part of this Subcontract as if they were attached hereto and described in full.

2.0 Drawings – Designer (HOUSTON WATERWORKS TEAM Engineers)

Drawing Package	Description	Revision
Early Work Package 4 – Raw Water Pipelines	Draft Issued for Construction Drawings August 2017 (No. of pages: 77) Transmitted via Aconex on September 20, 2017	0

3.0 Specifications - Designer (HOUSTON WATERWORKS TEAM Engineers)

Specification Package	Description	Revision
Draft IFC for Early Work Package 4	Project Manual Volume 2 of 2 Division 02 through 16, August 2017	0
Draft IFC for Early Work Package 4	Project Manual Volume 1 of 2 Division 00 through 01, August 2017	0

4.0 Other Documents

Trenchless Crossings of West Lake Houston Parkway Geotechnical Baseline Report Rev 0
Supplement to Early Work Package 4 – Trenchless Crossings of West Lake Houston Parkway
Geotechnical Baseline Report November 2017

- EWP 3 IFC Drawings (Information Only) Rev. 0
- EWP 1 & 3 Specifications (Information Only) Rev 0
- EWP 1 Permit Set Drawing (Information Only) Rev. 0
- EWP 1 City of Houston Code Enforcement Plan Check Permit, Rev. 0
- EWP 1 Harris County General Civil Site and SWQ Permits, Rev. 0
- EWP 1 Harris County Trailers Permits, Rev. 0
- EWP 1 TCEQ General Permit- NOI, Rev. 0
- EWP 3 City of Houston Floodplain Development Permit, Rev. 0
- EWP 4 Harris County General Civil Site Permit, Rev. 0
- PMT 404 Permit-Common-20171206 USACE 404 Permit Documents with TCEQ Approval, Rev. 0

END TECHNICAL DOCUMENTS – Exhibit B

Exhibit C – Pricing, Payment and Change Management

1.0 Pricing

All pricing described herein shall be firm and fixed for the duration of the Subcontract and is subject to the mutually-agreed escalation amounts. Pricing shall include, but not be limited to, all costs for the execution of the Work, including consumables required in performing the Work, construction equipment, tools, permanent materials and equipment, temporary facilities (for offices, sanitary facilities, storage and construction aids), office overhead, management, Workers' Compensation, national and local income taxes, FICA, vacation allowance, life insurance contribution, and any other benefits given by Subcontractor to its employees. Subcontractor's fixed prices and unit rates include Overhead and profit, salaries and wages, work visas and documents, vacation, public holiday pay and allowances, sick pay, medical expenses, insurance, labor, supervision, general expenses, all applicable taxes and duties, without regard to difficulty in performing the Work.

2.0 Subcontract Price

HOUSTON WATERWORKS TEAM agrees to pay Subcontractor for complete, satisfactory, and timely performance of the Work the following Subcontract Price, including applicable taxes.

Lump Sum Price for clearing and grubbing, demo, dewatering, shoring, shield tunneling, jack & bore, furnish and install storm drain piping, furnish and install (2) 108 in. Raw Water pipelines, Road Repair, Site Restoration, Cathodic Protection, Air Release & Vac Valve vaults, Access Manways, Fencing and Rock Filter Dams	\$31,597,812.00
Deduct for Boring & Tunneling Company of America, LLC	\$(223,266.79)
Deduct for Reduced Spacing Between pipes from 5' to 3'	\$(379,524.68)
Bonds	\$142,190.15
Taxes	\$159,900.00

Total Lump Sum Subcontract Price \$31,297,110.68

3.0 Price Breakdown and Labor Hours

The Subcontract Price is the sum of the Pricing Breakdown detailed in Attachment C-3-1, Price Breakdown and Labor Hours, which identifies the costs and labor-hours associated with each element of the Work. The pricing and labor-hours identified in Attachment C-3-1 will be the basis on which any changes to the Work shall be priced.



Houston Waterworks Team

Attachment C-3-1 – Subcontract Price Breakdown and Labor-Hours N/A

[illegible]



Houston Waterworks Team

N/A

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EXHIBIT A

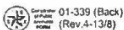
4.0 Alternatives N/A

The following options may be exercised by HOUSTON WATERWORKS TEAM at its sole discretion. If exercised, all other terms and provisions of the Subcontract shall remain unchanged, except as set forth below.

1.	{Insert Description, include any specified exercise date}	US \$
2.		US \$

5.0 Taxes

☒ Owner Tax Exemption Certification



Texas Sales and Use Tax Exemption Certification

This certificate does not require a number to be valid.

Name of purchaser, firm or agency Houston Water Works Team	
Address (Street & number, P.O. Box or Route number) 9191 S. Jamaica St.	Phone (Area code and number) 720-286-1865
City, State, ZIP code Englewood, CO 80112	

I, the purchaser named above, claim an exemption from payment of sales and use taxes (for the purchase of taxable items described below or on the attached order or invoice) from:

Seller: **Barnard Construction Company**

Street address: **701 Gold Ave.** City, State, ZIP code: **Bozeman, MT 59715**

Description of items to be purchased or on the attached order or invoice:
Barnard Construction will be installing two parallel 108" diameter pipelines underground, used in the treatment of water/wastewater for the Northeast Water Purification Plant, City of Houston, TX

Purchaser claims this exemption for the following reason:
Water Conservation Equipment, Sec 151.355 - Government Project 697592 City of Houston, TX

I understand that I will be liable for payment of all state and local sales or use taxes which may become due for failure to comply with the provisions of the Tax Code and/or all applicable law.

I understand that it is a criminal offense to give an exemption certificate to the seller for taxable items that I know, at the time of purchase, will be used in a manner other than that expressed in this certificate, and depending on the amount of tax evaded, the offense may range from a Class C misdemeanor to a felony of the second degree.

Purchaser sign here	Title Tax Manager	Date 2/2/18
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NOTE: This certificate cannot be issued for the purchase, lease, or rental of a motor vehicle.
THIS CERTIFICATE DOES NOT REQUIRE A NUMBER TO BE VALID.
Sales and Use Tax "Exemption Numbers" or "Tax Exempt" Numbers do not exist.

This certificate should be furnished to the supplier.
Do not send the completed certificate to the Comptroller of Public Accounts.

6.0 Pricing for Changes to the Work

The Subcontract Price may be modified by Change Order for changes in the Work pursuant to Article 7.0 of the General Terms and Conditions to the Subcontract.

- 6.1 Unit Rate pricing for additions or reductions to the Work are laid out in Attachment C-6-1, Unit Prices, which applies to specific portions of the Work, and shall be used for adjusting the Subcontract Price where original quantities change during the execution of the Work.
- 6.2 Attachment C-6-2, Labor Rates, shall apply to Work authorized by a Change Order in accordance with the Subcontract on a time-and-material basis and in accordance with the following:
 - 6.2.1 *The rates set forth in Attachment C-6-2, Labor Rates, are inclusive of the base hourly wages, all labor burden, payroll taxes, workers compensation, insurance, employee benefits, small tools, consumables, expendables, overhead, and profit.*
 - 6.2.2 *No charges for labor shall be accepted by HOUSTON WATERWORKS TEAM for labor not listed in Attachment C-6-2, Labor Rates and Markup for Services Authorized.*
 - 6.2.3 *Labor rates for standby time shall be approved in writing by HOUSTON WATERWORKS TEAM and shall be charged at the applicable rate less the profit portion.*
 - 6.2.4 *All rates are firm for the duration of the Subcontract unless otherwise stated. All rates are subject to audit.*
 - 6.2.5 *Small Tools and Consumables include tools, equipment, and expendables with a new unit cost of less than \$1,000 USD.*
 - 6.2.6 *Overhead and profit shall not apply on the premium for overtime and double-time. Only the fringes allowed by the applicable labor agreement shall be applied to the premium time rates.*
 - 6.2.7 *Payroll taxes and insurance, including the costs for FICA, FUI, and SUI, shall be reimbursed at Subcontractor's actual experience factor during the previous calendar year for Federal and State Unemployment Compensation, Worker's Compensation/Employer Liability Insurance and all other applicable insurance, including retrospective adjustments, which are applicable to straight-time rates.*
 - 6.2.8 *Subcontractor shall not invoice for field staff/supervisory personnel assigned to a change in the Work if the change does not extend the time such personnel are required on site by the original Scope of Work.*
- 6.3 Attachment C-6-3, Equipment Rates, shall be used for charging the time expended executing the Work authorized by Change Order in accordance with the Subcontract. Subcontractor owned equipment rates shall not exceed local prevailing rates for similar equipment and shall conform to the following provisions:
 - 6.3.1 *Rates are all-inclusive of fuel, consumables, maintenance, repair, applicable tax, overhead, profit, and all other costs of usage, unless otherwise stated.*
 - 6.3.2 *Cost of labor to operate equipment is not included in the rates. Cost of special rigging, if not listed separately, is included.*
 - 6.3.3 *The mobilization and demobilization costs of transporting equipment to and from the Project Site is not applicable to equipment already onsite for use by Subcontractor on other work.*
 - 6.3.4 *In all cases, the equipment rate charged shall be the lowest applicable rate that corresponds to the duration(s) the equipment is used.*
 - 6.3.5 *Unless specifically stated otherwise, it is agreed that the stated equipment shall be available to HOUSTON WATERWORKS TEAM at the quoted rates for the duration of this Subcontract.*
 - 6.3.6 *Subcontractor shall advise HOUSTON WATERWORKS TEAM if the total rental cost of any individual item of Subcontractor-owned equipment is to exceed seventy percent (70%) of the purchase price of such equipment.*
 - 6.3.7 *For equipment not listed herein, Subcontractor agrees to supply such equipment for this Project from a point as near as possible to the Project site to minimize mobilization and demobilization lump sum amount.*
 - 6.3.8 *All equipment shall arrive at the site in good working condition, complete with the current licenses and certificates, and manufacturers' safety guards and equipment attached.*

- 6.3.9 *All equipment on the project site shall be maintained by Subcontractor in good working condition. Non-working equipment shall not be charged to HOUSTON WATERWORKS TEAM and shall be immediately repaired at Subcontractor's expense or shall be replaced and taken offsite.*
- 6.3.10 *All equipment must be identified by Subcontractor equipment number or serial number, model number, nomenclature, date of acquisition, and cost at time of purchase.*
- 6.3.11 *Construction equipment shall be charged based upon actual usage within one-quarter (¼) hour when using an hourly rate. Unless usage is monitored on a resource allocation report, which is acceptable to HOUSTON WATERWORKS TEAM, the hourly rate shall be calculated using monthly rental rates divided by 173.33.*
- 6.3.12 *Mobilization and demobilization of Subcontractor's equipment shall be coordinated with and subject to the approval of HOUSTON WATERWORKS TEAM authorized representatives.*
- 6.4 Work authorized by a Change Order in accordance with the Subcontract on a Time and Material basis may require Subcontractor to provide the following services provided by others. Where authorized the following service markups will apply:
 - 6.4.1 *Lower-tier Subcontracts: Actual substantiated net cost of any authorized lower-tier subcontracted work, plus a markup of five percent (5%).*
 - 6.4.2 *Contracts or Purchase Orders assigned to Subcontractor by HOUSTON WATERWORKS TEAM, actual substantiated net cost of any authorized Lower-tier subcontracted work, plus a markup of five percent (5%).*
 - 6.4.3 *Material Purchase Orders: actual substantiated invoice cost of materials (excluding small tools, consumables, and expendables) purchased by Subcontractor and incorporated in the Work, plus a markup of five percent (5%) and applicable sales and use taxes and freight at cost, net of any applicable trade or cash discounts, and any rebates due to Subcontractor.*
 - 6.4.4 *Materials furnished from Subcontractor's stock shall be valued on the basis of Supplier's standard accounting method (LIFO, FIFO, or other).*
 - 6.4.5 *At completion of the Work, surplus materials shall be returned or sold at prices approved by HOUSTON WATERWORKS TEAM and credited to the Subcontract Price.*
 - 6.4.6 *Equipment Rental: Actual substantiated net invoice cost of third-party leased or rented construction equipment/machinery, plus a markup of five percent, (5%) which shall be inclusive of applicable sales and use taxes, fuel, maintenance, and transportation, and handling to and from the site of the Work, not to exceed local prevailing rates.*
- 6.5 Other Reimbursable Costs: Actual net cost of the following incurred and paid when directly related to changes in the Work:
 - 6.5.1 Additional premiums required for insurance, permits, licenses, and fees required by applicable governing authorities for Construction of additional work required for the Project.
 - 6.5.2 Cost of additional inspection and testing fees, customs duties, and royalties.
 - 6.5.3 Other items of cost pre-approved in writing by HOUSTON WATERWORKS TEAM prior to being incurred
- 6.6 Markups: The percentages for markup identified in Article 6.4 are all-inclusive of profit and overhead, including superintendence, home/main office, and field office overhead and expense, as well as the use and depreciation of small tools.
- 6.7 Non-reimbursable: The following costs shall not be separately reimbursed:
 - Home Office Cost
 - 6.7.1 The salary costs and other compensation of officers and/or partners.
 - 6.7.2 Home office-based professional staff and associated labor burden unless pre-approved by HOUSTON WATERWORKS TEAM.
 - 6.7.3 Salary costs and other compensation of employees doing general administrative work.
 - 6.7.4 All Computer and telecommunications costs.

- 6.7.5 Home office, including any shop or subsidiary office, rent or depreciation; utilities; equipment depreciation and maintenance and operating cost; property and other business taxes; office expense; and Subcontractor's corporate business expense.
- 6.7.6 Excise, privilege, business, gross receipts, and state and federal taxes based upon profit and all other taxes paid by Subcontractor in connection with the Work are considered part of Subcontractor's overhead and profit.

Field Expenses

- 6.7.7 Travel costs for non-reimbursable individuals.
- 6.7.8 The salary cost of project managers, project engineers, and other personnel normally stationed in Subcontractor's home office when assigned to the site.
- 6.7.9 Small Tools and Consumables, as defined in Article 6.2.5

- 6.8 Documentation: All labor, materials, and equipment used for executing Changes to the Work shall require time records to be documented and submitted daily for HOUSTON WATERWORKS TEAM approval, and such approved documentation shall accompany each Application for Payment of Time and Material Work. The applicable Change Order Requests/Change Orders shall be referenced in the submittals. HOUSTON WATERWORKS TEAM shall have no obligation to make payment to Subcontractor in the absence of an approved Change Order Request and formal Change Order.



Attachment C-6-1 - Unit Rate Pricing

Subcontractor may receive written authorization to perform additions to or deletions from the Work on a Unit Rate Price basis; the costs of Changes shall be calculated in accordance with the following Unit Rate Pricing.

Unless otherwise noted, each Unit Rate Price includes all direct and indirect costs for labor, equipment, consumables, small tools, transportation, testing services, general work expenses, applicable taxes, overhead, profit, and other costs required to complete the Work.

- 1. The all-inclusive Unit Rate Prices are fixed for the duration of this Subcontract, not subject to escalation.
- 2. The Unit Rate Prices shall include all Work the Subcontractor is required to perform without regard to the quantities involved, difficulty in performing the Work, materials or equipment required, and specific handling of materials and equipment.
- 3. All Unit Rate Prices shall apply at one hundred percent (100%) of their value for both additions and deletions to the Scope of Work unless mutually agreed otherwise in accordance with the Contract Documents.

Item	Description	UOM	Unit Price USD (Add or Deduct)
1	Pipe Trench Haul-off/Move to Plant Site	CY	\$7.91
2	CSLM for Pipe Zone	CY	\$67.99
3	Native Backfill	CY	\$19.74
4	108" Steel Pipe Supply/Install	LF	\$1,065.15
5	Tunnel (Line 1 Tunnel only) – 132" Casing	LF	\$11,779.02
6	3 EA – 30" Jack & Bore	LF	\$406.41
7	48" RCP Storm Drain	LF	\$678.12
8	36" RCP Storm Drain	LF	\$578.16
9	18" RCP Storm Drains	LF	\$377.63
10			
11			
12			
13			



Attachment C-6-2 – Labor Rates

HWT-P05NF-0504-F1-10 Form Rev 0 Jun-17
HWT-P05NF-0504-F1-10 Form Rev 0 Jun-17

To be completed for each Craft							Date	2/8/2018		
Craft:							Subcontractor	Barnard Construction Company, Inc.		
Subcontract Labor		Yes <u>x</u>	No _____				Subcontract No			
Agreement Expiration Date										
Classification (e.g. foreman, journeyman, apprentice, etc.)	Base Wage Rate	Overhead and Profit @ <u>20</u> % of Base Wage	Fringe Benefits @ <u>45</u> % of Base Wage	Small Tools and Consumables @ <u>6</u> % of Base Wage	Payroll Taxes @ <u>10</u> % of Base Wage	Workers Comp & Liab Insurance @ <u>17</u> % of Base Wage	Total Straight Time Bill Rate	Premium Time Overtime	Premium Time Double Time	Shift Differential
General Laborer	17.00	3.40	7.65	1.02	1.70	2.89	33.66	50.49	n/a	+2.5/hr
Pipelaye	19.00	3.80	8.55	1.14	1.90	3.23	37.62	56.43	n/a	+2.5/hr
Skilled Laborer	22.00	4.40	9.90	1.32	2.20	3.74	43.56	65.34	n/a	+2.5/hr
BCCI Traveling Laborer	32.00	6.40	14.40	1.92	3.20	5.44	63.36	95.04	n/a	+2.5/hr
Grade Checker	21.00	4.20	9.45	1.26	2.10	3.57	41.58	62.37	n/a	+2.5/hr
Roller Operator/Oiler	24.00	4.80	10.80	1.44	2.40	4.08	47.52	71.28	n/a	+2.5/hr
Loader/Dozer Operator	28.00	5.60	12.60	1.68	2.80	4.76	55.44	83.16	n/a	+2.5/hr
Excavator Operator	29.00	5.80	13.05	1.74	2.90	4.93	57.42	86.13	n/a	+2.5/hr
Crane Operator	40.00	8.00	18.00	2.40	4.00	6.80	79.20	118.80	n/a	+2.5/hr
BCCI Traveling Operator	32.00	6.40	14.40	1.92	3.20	5.44	63.36	95.04	n/a	+2.5/hr
Crew Foreman	32.00	6.40	14.40	1.92	3.20	5.44	63.36	95.04	n/a	+2.5/hr
Mechanic	40.00	8.00	18.00	2.40	4.00	6.80	79.20	118.80	n/a	+2.5/hr
Truck Driver	23.00	4.60	10.35	1.38	2.30	3.91	45.54	68.31	n/a	+2.5/hr

Definition of Overtime:

Straight Time hours defined as	<40 hrs/week
Overtime hours defined as	>40 hrs/week
Double Time hours defined as	Not applicable. Double Time is not anticipated on this Contract.
Shift differential hours defined as	Non-typical start and stop times (night-shift work)
Stand by rates are less than <u>n/a</u> % of Total Straight time Bill Rate	

Attachment C-6-3 – Equipment Rates

For changes to the Work on a time-and-material basis, the following Subcontractor-owned equipment rates shall apply to authorized use at the all-inclusive hourly, daily, weekly, and/or monthly rates indicated and where authorized but not used standby rates.

Equipment Description	\$ Mob/ Demob	\$ per Hour	\$ per Day	\$ per Week	\$ per Month	Standby Rate per hour
CAT 308 Excavator	2,000.00	73.00	584.00	2,920.00	12,848.00	36.50
CAT 320 Excavator	2,000.00	147.00	1,176.00	5,880.00	25,872.00	73.50
CAT 336 Excavator	3,000.00	202.00	1,616.00	8,080.00	35,552.00	101.00
CAT 349 Excavator	3,000.00	272.00	2,176.00	10,880.00	47,872.00	136.00
CAT 374 Excavator	5,000.00	365.00	2,920.00	14,600.00	64,240.00	182.50
CAT 390 Excavator	5,000.00	423.00	3,384.00	16,920.00	74,448.00	211.50
CAT D5 Dozer	2,000.00	92.00	736.00	3,680.00	16,192.00	46.00
CAT D6 Dozer	3,000.00	162.00	1,296.00	6,480.00	28,512.00	81.00
CAT D8 Dozer	5,000.00	281.00	2,248.00	11,240.00	49,456.00	140.50
CAT 262 Skidsteer	1,500.00	46.00	368.00	1,840.00	8,096.00	23.00
CAT 966 Loader	3,000.00	141.00	1,128.00	5,640.00	24,816.00	70.50
CAT 980 Loader	5,000.00	196.00	1,568.00	7,840.00	34,496.00	98.00
CLSM Machine	15,000.00	390.00	3,120.00	15,600.00	68,640.00	195.00
60 Ton Rough-Terrain Crane	5,000.00	176.00	1,408.00	7,040.00	30,976.00	88.00
75 Ton Rough-Terrain Crane	6,000.00	176.00	1,408.00	7,040.00	30,976.00	88.00
90 Ton Rough-Terrain Crane	8,000.00	313.00	2,504.00	12,520.00	55,088.00	156.50
100 Ton Crawler Crane	25,000.00	339.00	2,712.00	13,560.00	59,664.00	169.50
150 Ton Crawler Crane	35,000.00	342.00	2,736.00	13,680.00	60,192.00	171.00
All Terrain Forklift (10,000 lb)	1,500.00	67.00	536.00	2,680.00	11,792.00	33.50
CAT 14 Motor Grader	3,000.00	182.00	1,456.00	7,280.00	32,032.00	91.00
CAT 730 Articulated Truck	5,000.00	152.00	1,216.00	6,080.00	26,752.00	76.00
CAT 740 Articulated Truck	5,000.00	193.00	1,544.00	7,720.00	33,968.00	96.50
CAT 740 Ejector Truck	5,000.00	197.00	1,576.00	7,880.00	34,672.00	98.50
CAT CS433 Compactor	2,000.00	54.00	432.00	2,160.00	9,504.00	27.00
CAT CS56 Compactor	2,000.00	78.00	624.00	3,120.00	13,728.00	39.00
CAT CP74 Compactor	3,000.00	103.00	824.00	4,120.00	18,128.00	51.50
4000 Gal. Water Truck	3,000.00	74.00	592.00	2,960.00	13,024.00	37.00
25 KW Generator (Single Shift)	500.00	22.00	176.00	880.00	3,872.00	11.00
45 KW Generator (Single Shift)	1,000.00	32.00	256.00	1,280.00	5,632.00	16.00

Equipment Rates include Maintenance and Fuel: Yes ☒ No. ☐

7.0 Invoicing Instructions and Requirements

Completed Work shall be agreed upon between Subcontractor and HOUSTON WATERWORKS TEAM Construction and Project Controls on a weekly basis. At the end of each month, the Subcontractor may invoice for the completed Work in accordance with Article 4.0. of the General Terms and Conditions Subcontract Price and the following:

7.1 Schedule of Values

- 7.1.1 The owner requires that invoicing from the project team be in alignment with the project schedule.
- a. HWT & Subcontract jointly develops the schedule for your portion of the work.
 - b. HWT will forward a list of schedule activity items to each contractor in spreadsheet format.
 - c. Contractor ‘cost loads’ each schedule activity and returns to HWT
 - d. HWT (Pete Stringer/Mike Blake) approves cost loaded schedule or returns to sub with modification request.
 - e. Cost loaded schedule becomes the contractors Schedule of Values for monthly invoicing.

7.2 Subcontractor Invoicing

- 7.2.1 Deadline for monthly draft Schedule of Values (SOV) invoice submission to HWT no later than the 15th of the month or nearest business day if the 15th falls on Saturday (due the 14th) or Sunday (due the 16th).
- 7.2.2 The ‘Bill Thru’ period of the monthly invoice is through the last Friday of the current month.
- 7.2.3 By the 15th, draft SOV should be submitted by email with SOV attached in Excel to the following:
- To: Area Manager – Rich Gomez Richard.Gomez@newppexpansion.com
cc: Deputy CM – Pete Stringer - Peter.Stringer@newppexpansion.com
cc: Cost Controls Mgr. Scott Cervenka Scott.Cervenka@newppexpansion.com
- 7.2.4 Field walk (HWT and subcontractor) to occur within 3 work days of the 15th and revisions requested if applicable.
- 7.2.5 By the 20th of the month or nearest business day, subcontractor submits invoice in excel format with changes (if applicable) for final approval **via Aconex email** to the following:
- To: Area Manager (Rich Gomez)
cc: Deputy CM (Pete Stringer)
cc: Cost Controls Manager (Scott Cervenka)
cc: Subcontracts Manager (Jane Summerlin) Jane.Summerlin@newppexpansion.com
- 7.2.6 HWT replies with final approval
- 7.2.7 Upon final approval subcontractor submits finalized invoice in a single pdf documents including all attachments listed in section 7.3 of the agreement **by means of both:**

Aconex email:
To: DCM HWT Document Controls - NEWPP
Select Type: Subcontractor Invoice
and A/P workflow:

via email to: apinvoices@ch2m.com
cc: Pam.Bitschenauer@CH2M.com
cc: Scott.Cervenka@newppexpansion.com

- 7.3 Subcontractor will sign and submit a “**Conditional** Waiver and Release on **Progress Payment** (Attachment C-7-2A) with their initial payment application. Subcontractor will sign and submit “**Unconditional** Waiver and Release on **Progress Payment** (Attachment C-7-2B) following receipt of payment from HWT.
- Subcontractor will sign and submit a “**Conditional** Waiver and Release on **Final Payment** (Attachment C-7-3A) with their initial final payment application. Subcontractor will sign and submit “**Unconditional** Waiver and Release on **Final Payment** (Attachment C-7-3B) following receipt of final payment from HWT.

Subcontractor shall complete the Application for Payment. **HWT shall not approve the Application for Payment without the notarized** applicable waiver.

Your PDF invoice package shall be uniquely numbered and reference the Project Number/ Subcontract number and include the following:

- a. Each application for Payment/Invoice -Notarized
- b. Summary Invoice, Progress Billing Form- Notarized
- c. MWSBE Utilization Schedule (if you have lower tier subcontractors or suppliers working under you).
- d. Appropriate Waiver and Release on Progress Payment- Notarized.
- e. List of Subcontractors and Suppliers.

7.4 HWT Bill to address:

Houston Waterworks Team- Northeast Water Purification Plant Expansion

12630 Waterworks Way
Humble, TX 77396

Include:

HWT Tax ID No. 47-3610619

HWT Project Number: 697592

Invoice No: (Unique numbering required)

HWT PO or Subcontract Agreement No.: 697592-4010

Invoices not conforming to these instructions will be returned for correction.

- 7.5 HOUSTON WATERWORKS TEAM shall pay Subcontractor, seven days after it receives payment from the COH in accordance with the approved Application for Payment and these requirements, the amount to which the Subcontractor is entitled, less a five percent (5%) retention.

- 7.6 A final payment, consisting of the last progress billing after completion of all the Work, including the release of retention, shall be made by HOUSTON WATERWORKS TEAM within 45 days after the last of the following to occur:

7.6.1 *Final completion of the Work by the Subcontractor.*

7.6.2 *Receipt by HOUSTON WATERWORKS TEAM of the executed Attachment C-7-3B, Unconditional Waiver and Release on Final Payment form, which confirms Subcontractor has paid in full all persons furnishing labor, materials, or services in connection with the Work and that neither Subcontractor nor any other person claiming under or through the Subcontractor has filed or has the right to file a lien or any other claim against, HOUSTON WATERWORKS TEAM, or the premises of Owner.*

7.6.3 *Delivery of all guarantees, warranties, performance charts, as-built drawings, and similar items with respect to the Work.*

7.6.4 *Receipt by HOUSTON WATERWORKS TEAM of all documents and data specified in the Subcontract*

- 7.7 All applicable Sales and Use Tax must be shown as a separate line item on the Schedule of Values at actual incurred cost. A list or report of tax is required as backup to substantiate the tax, complete with vendor names, invoice numbers, and tax paid.

Invoices not conforming to these instructions may be returned for correction.

- 7.8 Subcontractor will also submit with each invoice Attachment Forms C-7-1D & 1E.

Attachment C-7-1A – Sample Invoice

[INSERT SUPPLIER LOGO HERE]		Barnard			
		Remit to Address			
		City, State Zip Code			
		Phone:			
		Fax:			
Houston Waterworks Team				Date: 02/14/18	
12630 Water Works Way				CH2M HILL Project No.: 697592	
Humble, Texas 77396				Project Name: NEWPP	
Tax ID No. 47-3610619				Project Manager: Paul Vranesic	
HWT PO or Subcontract #		697592-xxxx		Invoice No.: 1	
				Period Ending: 02/14/18	
Submit Invoices to:					
HWT.DCM@newppexpansion.com					
In Aconex Module, Submit to: HWT Subcontractors					
SUMMARY INVOICE, PROGRESS BILLING NO. --					
Cost Code	Contract		\$ Amount	Previous	Amount This
Task/Description	Amount	% Complete	Complete to Date	Invoice	Period
SUBCONTRACT/PURCHASE ORDER DETAIL BREAKDOWN					
Cost Code 1 - Task/Description		60.38%	\$ 32.00	\$ -	\$ 32.00
TOTAL AMOUNTS INCLUDING RETENTION	0		\$ 32.00	\$ -	\$ 32.00
AMOUNT DUE THIS PERIOD					\$ 32.00
Application is made for payment as shown below in connection with the Subcontract or Purchase Order					
See continuation sheets attached for additional breakdowns					
1. ORIGINAL CONTRACT SUM			\$ 50.00		
2. NET CHANGE(S) BY CHANGE ORDERS			\$ -		
3. ADJUSTED CONTRACT SUM TO DATE			\$ 50.00		
4. TOTAL OF COMPLETED WORK TO DATE			\$ 32.00		
5. LESS RETENTION (5%)			\$ (1.60)		
6. CUMULATIVE AMOUNT DUE			\$ 30.40		
7. LESS AMOUNTS PAID TO DATE			\$ -		
8. BALANCE DUE THIS PERIOD			\$ 30.40		
9. BALANCE REMAINING UNDER CONTRACT			\$ 18.00		
CERTIFICATION FOR PAYMENT AND LIEN WAIVER:					
In consideration of payment to the undersigned Subcontractor of the amount due on this Application, Subcontractor hereby waives and releases all Claims, Liens and rights to Lien, for all Work and Labor performed and materials supplied for the Project through the date of this Application except for retainage, unresolved claims previously and properly submitted in writing, or items furnished after that date. Except as specifically disclosed in this Application for Payment, Subcontractor certifies that all previous payments received under this Subcontract have been applied to discharge in full the Subcontractor's obligations in connection with the Work and further certifies that it has paid all low er-tier subcontractors and suppliers for all work performed and included in such previous Pay Applications. Subcontractor hereby w aives, remises, releases and forever discharges HWT, its Subsidiaries and Affiliates, and Owner harmless against any costs, liens, claims, demands and causes of action w hatsoever arising out of said Subcontract, including attorneys fees, incurred in discharging liens or claims					
The undersigned Subcontractor certifies that the Work covered by this Application for Payment has been completed in accordance with the Subcontract Documents and that current payment shown herein is now due. Subcontractor certifies that it will, promptly upon receipt of payment from HWT, discharge in full the Subcontractor's obligations in connection with the Work, including making payment to all lower-tier subcontractors and suppliers for work performed and included in this Application for Payment.					
<input type="checkbox"/> Copies of lower tier subcontractor/supplier lien waivers attached					
The foregoing instrument was acknowledged before me this _____ of _____ 20__.					
By _____			By: _____		
Notary Public			Authorized Signature		
My commission expires: _____			Printed Name _____		
			Title _____		
AMOUNT CERTIFIED: _____					

Attach appropriate notarized waiver with each Payment Application



Houston Waterworks Team

APPLICATION AND CERTIFICATION FOR PAYMENT				AIA DOCUMENT G702		PAGE ONE OF 2		PAGES	
TO OWNER: Houston Waterworks Team		PROJECT: NEWPP		APPLICATION NO. 1		Distribution to:			
						<input type="checkbox"/> OWNER			
						<input type="checkbox"/> ARCHITECT			
FROM CONTRACTOR:		VIA ARCHITECT: HWT		PERIOD TO: 10/9/2017		<input checked="" type="checkbox"/> CONTRACTOR			
697592-4XXX						<input type="checkbox"/>			
				PROJECT NOS: 697592					
CONTRACT FOR: HOUSTON WATERWORKS TEAM				CONTRACT DATE: 10/31/2017					
CONTRACTOR'S APPLICATION FOR PAYMENT Application is made for payment, as shown below, in connection with the Contract. Continuation Sheet, AIA Document G703, is attached.									
1. ORIGINAL CONTRACT SUM \$ 100.00 2. Net change by Change Orders \$ 7.06 3. CONTRACT SUM TO DATE (Line 1 + 2) \$ 107.06 4. TOTAL COMPLETED & STORED TO DATE (Column G on G703) \$ 39.06 5. RETAINAGE: a. 5% of Completed Work \$ 1.95 (Column D + E on G703) b. of Stored Material \$ 0.00 (Column F on G703) Total Retainage (Lines 5a + 5b or Total in Column I of G703) \$ 1.95 6. TOTAL EARNED LESS RETAINAGE \$ 37.11 (Line 4 Less Line 5 Total) 7. LESS PREVIOUS CERTIFICATES FOR PAYMENT (Line 6 from prior Certificate) \$ 8. CURRENT PAYMENT DUE \$ 37.11 9. BALANCE TO FINISH, INCLUDING RETAINAGE 69.95 (Line 3 less Line 6)									
CONTRACTOR'S CERTIFICATE FOR PAYMENT The undersigned Contractor certifies that to the best of the Contractor's knowledge, information and belief the Work covered by this Application for Payment has been completed in accordance with the Contract Documents, that all amounts have been paid by the Contractor for Work for which previous Certificates for Payment were issued and payments received from the Owner, and that current payment shown herein is now due.									
CONTRACTOR: By: Date: 10/9/2017 State of: Texas County of: Houston Subscribed and sworn to before me this day of Notary Public: My Commission expires:									
ARCHITECT'S CERTIFICATE FOR PAYMENT In accordance with the Contract Documents, based on on-site observations and the data comprising the application, the Architect certifies to the Owner that to the best of the Architect's knowledge, information and belief the Work has progressed as indicated, the quality of the Work is in accordance with the Contract Documents, and the Contractor is entitled to payment of the AMOUNT CERTIFIED.									
AMOUNT CERTIFIED \$									
(Attach explanation if amount certified differs from the amount applied. Initial all figures on this Application and on the Continuation Sheet that are changed to conform with the amount certified.) ARCHITECT: By: Date:									
This Certificate is not negotiable. The AMOUNT CERTIFIED is payable only to the Contractor named herein. Issuance, payment and acceptance of payment are without prejudice to any rights of the Owner or Contractor under this Contract.									
AIA DOCUMENT G702 - APPLICATION AND CERTIFICATION FOR PAYMENT - 1992 EDITION - AIA - ©1992 THE AMERICAN INSTITUTE OF ARCHITECTS, 1735 NEW YORK AVE., N.W., WASHINGTON, DC 20006-5292									
Users may obtain validation of this document by requesting a completed AIA Document D401 - Certification of Document's Authenticity from the Licensee.									

Subcontract No.: 697592-4010
 Subcontract Title: EWP4 – 108in Transmission Mains



Attachment C-7-1C -Continuation Sheet – AIA Document G703

CONTINUATION SHEET			AIA DOCUMENT G703				PAGE 1 OF 1		
AIA Document G702, APPLICATION AND CERTIFICATION FOR PAYMENT, containing Contractor's signed certification is attached.			APPLICATION NO: 1						
In tabulations below, amounts are stated to the nearest dollar.			APPLICATION DATE: 10/09/17						
Use Column I on Contracts where variable retainage for line items may apply.			PERIOD TO: 10/09/17						
			ARCHITECT'S PROJECT NO: 697592						
A ITEM NO.	B DESCRIPTION OF WORK	C SCHEDULED VALUE	D WORK COMPLETED FROM PREVIOUS APPLICATION (D + E)	E THIS PERIOD	F MATERIALS PRESENTLY STORED (NOT IN D OR E)	G TOTAL COMPLETED AND STORED TO DATE (D+E+F)	H % (G ÷ C)	I BALANCE TO FINISH (C - G)	J RETAINAGE (IF VARIABLE RATE)
WBS CODE 1	WBS DESCRIPTION	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK
P6 CODE	P6 DESCRIPTION	\$10.00		\$5.00		\$5.00	50.00%	\$5.00	\$0.25
P6 CODE	P6 DESCRIPTION	\$10.00		\$6.00		\$6.00	60.00%	\$4.00	\$0.30
P6 CODE	P6 DESCRIPTION	\$10.00		\$4.00		\$4.00	40.00%	\$6.00	\$0.20
P6 CODE	P6 DESCRIPTION	\$10.00		\$8.00		\$8.00	80.00%	\$2.00	\$0.40
P6 CODE	P6 DESCRIPTION	\$10.00		\$9.00		\$9.00	90.00%	\$1.00	\$0.45
	"WBS 1 SOV" TOTAL	\$50.00	\$0.00	\$32.00	\$0.00	\$32.00	64.00%	\$18.00	\$1.60
WBS 1 CHANGE ORDERS		BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK
WBS CODE	WBS DESCRIPTION	\$1.00		\$1.00		\$1.00	100.00%	\$0.00	\$0.05
WBS CODE	WBS DESCRIPTION	\$2.00		\$2.00		\$2.00	100.00%	\$0.00	\$0.10
WBS CODE	WBS DESCRIPTION	\$1.56		\$1.56		\$1.56	100.00%	\$0.00	\$0.08
	"WBS SOV & CO" SUB TOTAL	\$54.56	\$0.00	\$36.56	\$0.00	\$36.56	67.01%	\$18.00	\$1.83
WBS CODE 2	WBS DESCRIPTION	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK
P6 CODE	P6 DESCRIPTION	\$10.00				\$0.00	0.00%	\$10.00	\$0.00
P6 CODE	P6 DESCRIPTION	\$10.00				\$0.00	0.00%	\$10.00	\$0.00
P6 CODE	P6 DESCRIPTION	\$10.00				\$0.00	0.00%	\$10.00	\$0.00
P6 CODE	P6 DESCRIPTION	\$10.00				\$0.00	0.00%	\$10.00	\$0.00
P6 CODE	P6 DESCRIPTION	\$10.00				\$0.00	0.00%	\$10.00	\$0.00
	"WBS 2 SOV" TOTAL	\$50.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00%	\$50.00	\$0.00
WBS CODE 2	WBS DESCRIPTION	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK
WBS CODE	WBS DESCRIPTION	\$1.00		\$1.00		\$1.00	100.00%	\$0.00	\$0.05
WBS CODE	WBS DESCRIPTION	\$1.00		\$1.00		\$1.00	100.00%	\$0.00	\$0.05
WBS CODE	WBS DESCRIPTION	\$0.50		\$0.50		\$0.50	100.00%	\$0.00	\$0.03
WBS 2 CHANGE ORDERS	"WBS SOV & CO" SUB TOTAL	\$52.50	\$0.00	\$2.50	\$0.00	\$2.50	4.76%	\$50.00	\$0.13
ORIGINAL CONTRACT	SUB TOTAL	\$100.00	\$0.00	\$32.00	\$0.00	\$32.00	32.00%	\$68.00	\$1.60
CHANGE ORDERS	SUB TOTAL	\$7.06	\$0.00	\$7.06	\$0.00	\$7.06	100.00%	\$0.00	\$0.35
ORIGINAL + CO'S	GRAND TOTALS	\$107.06	\$0.00	\$39.06	\$0.00	\$39.06	36.48%	\$68.00	\$1.95

Users may obtain validation of this document by requesting of the license a completed AIA Document D401 - Certification of Document's Authenticity

Subcontract No.: 697592-4010
 Subcontract Title: EWP4 – 108in Transmission Mains



Attachment C-7-1D - Stored Materials Summary Report

Contractor:						Application No:
Client:	Houston Waterworks Team					Application Date:
Stored Materials	Support Summary					Period To:
			*This Value should equal value if G703 column F from previous month		*This value shall be supported with supplier invoices attached to this summary.	*This Value should equal value if G703 column F from current month
G703 Item #	G703 Description of Work	Stored Material Location	Previous Stored Materials	Materials Previously Stored Put in Place this Period (enter as negative)	Current Stored Materials Additions	To Date Stored Materials
1.00	Example 1		100.00	(20.00)	50.00	130.00
2.00	Example 2		200.00	0.00	25.00	225.00
3.00	Example 3		0.00	0.00	300.00	300.00
4.00			0.00		0.00	0.00
5.00			0.00		0.00	0.00
6.00			0.00		0.00	0.00
7.00			0.00		0.00	0.00
8.00			0.00		0.00	0.00
9.00			0.00		0.00	0.00
10.00			0.00		0.00	0.00
11.00			0.00		0.00	0.00
12.00			0.00		0.00	0.00
13.00			0.00		0.00	0.00
14.00			0.00		0.00	0.00
15.00			0.00		0.00	0.00
16.00			0.00		0.00	0.00
17.00			0.00		0.00	0.00
18.00			0.00		0.00	0.00
19.00			0.00		0.00	0.00
20.00			0.00		0.00	0.00
21.00			0.00		0.00	0.00
22.00			0.00		0.00	0.00
23.00			0.00		0.00	0.00
24.00			0.00		0.00	0.00
25.00			0.00		0.00	0.00
26.00			0.00		0.00	0.00
27.00			0.00		0.00	0.00
28.00			0.00		0.00	0.00
29.00			0.00		0.00	0.00
30.00			0.00		0.00	0.00
31.00			0.00		0.00	0.00
32.00			0.00		0.00	0.00
33.00			0.00		0.00	0.00
34.00			0.00		0.00	0.00
			300.00		375.00	655.00

Subcontract No.: 697592-4010
 Subcontract Title: EWP4 – 108in Transmission Mains



Attachment C-7-1E MWSBE Participation (Submit with Invoice)

Contractor:		Barnard						Application No:		1	
Client:		Houston Waterworks Team						Application Date:		8-Feb-18	
MWSBE:		Participation (Submit with final invoice)						Period To:		8-Feb-18	

Attachment C-7-2A– Conditional Waiver and Release on Progress Payment

“CONDITIONAL WAIVER AND RELEASE ON PROGRESS PAYMENT

“Project _____

“Job No. _____

“On receipt by the signer of this document of a check from _____ (maker of check) in the sum of \$_____ payable to _____ (payee or payees of check) and when the check has been properly endorsed and has been paid by the bank on which it is drawn, this document becomes effective to release any mechanic’s lien right, any right arising from a payment bond that complies with a state or federal statute, any common law payment bond right, any claim for payment, and any rights under any similar ordinance, rule, or statute related to claim or payment rights for persons in the signer’s position that the signer has on the property of _____ (owner) located at _____ (location) to the following extent: _____ (job description).

“This release covers a progress payment for all labor, services, equipment, or materials furnished to the property or to _____ (person with whom signer contracted) as indicated in the attached statement(s) or progress payment request(s), except for unpaid retention, pending modifications and changes, **unresolved claims previously and properly submitted in writing**, or other items furnished.

“Before any recipient of this document relies on this document, the recipient should verify evidence of payment to the signer.

“The signer warrants that the signer has already paid or will use the funds received from this progress payment to promptly pay in full all of the signer’s laborers, subcontractors, materialmen, and suppliers for all work, materials, equipment, or services provided for or to the above referenced project in regard to the attached statement(s) or progress payment request(s).

Date _____

Company Name _____

By _____
(Signature)

Title _____

STATE OF TEXAS §
COUNTY OF _____ §

This instrument was acknowledged before me on this _____ day of __, 20 __,
by _____ (name), _____ (job
title) of _____ (company name).

NOTARY PUBLIC, STATE OF TEXAS

Attachment C-7-2B – Unconditional Waiver And Release On Progress Payment

NOTICE:

This document waives rights unconditionally and states that you have been paid for giving up those rights. It is prohibited for a person to require you to sign this document if you have not been paid the payment amount set forth below. If you have not been paid, use a conditional release form.

Project _____

Job No. _____

The signer of this document has been paid and has received a progress payment in the sum of \$__ for all labor, services, equipment, or materials furnished to the property or to _____ (person with whom signer contracted) on the property of _____ (owner) located at _____ (location) to the following extent: _____

(job description). The signer therefore waives and releases any mechanic's lien right, any right arising from a payment bond that complies with a state or federal statute, any common law payment bond right, any claim for payment, and any rights under any similar ordinance, rule, or statute related to claim or payment rights for persons in the signer's position that the signer has on the above referenced project to the following extent:

This release covers a progress payment for all labor, services, equipment, or materials furnished to the property or to _____ (person with whom signer contracted) as indicated in the attached statement(s) or progress payment request(s), except for unpaid retention, pending modifications and changes, **unresolved claims previously and properly submitted in writing** or other items furnished.

The signer warrants that the signer has already paid or will use the funds received from this progress payment to promptly pay in full all of the signer's laborers, subcontractors, materialmen, and suppliers for all work, materials, equipment, or services provided for or to the above referenced project in regard to the attached statement(s) or progress payment request(s).

Signature: _____
Date: _____
Company Name: _____
By (w/ title): _____

STATE OF TEXAS §
COUNTY OF _____ §

This instrument was acknowledged before me on this _____ day of _____, 20____, by _____ (name), _____ (job title) of _____ (company name).

NOTARY PUBLIC, STATE OF TEXAS

Attachment C-7-3A - Conditional Waiver And Release On Final Payment

Project _____

Job No. _____

On receipt by the signer of this document of a check from _____ (maker of check) in the sum of \$ _____ payable to _____ (payee or payees of check) and when the check has been properly endorsed and has been paid by the bank on which it is drawn, this document becomes effective to release any mechanic's lien right, any right arising from a payment bond that complies with a state or federal statute, any common law payment bond right, any claim for payment, and any rights under any similar ordinance, rule, or statute related to claim or payment rights for persons in the signer's position that the signer has on the property of _____ (owner) located at _____ (location) to the following extent _____ (job description).

This release covers the final payment to the signer for all labor, services, equipment, or materials furnished to the property or to _____ (person with whom signer contracted).

Before any recipient of this document relies on this document, the recipient should verify evidence of payment to the signer.

The signer warrants that the signer has already paid or will use the funds received from this final payment to promptly pay in full all of the signer's laborers, subcontractors, materialmen, and suppliers for all work, materials, equipment, or services provided for or to the above referenced project up to the date of this waiver and release.

Date _____

(Company name) _____

By _____ (Signature)

_____ (Title)

STATE OF TEXAS §

COUNTY OF _____ §

This instrument was acknowledged before me on this _____ day of _____, 20____,
by _____ (name), _____
(job title) of _____ (company name).

NOTARY PUBLIC, STATE OF TEXAS

Attachment C-7-3B – Unconditional Waiver and Release on Final Payment

NOTICE:

This document waives rights unconditionally and states that you have been paid for giving up those rights. It is prohibited for a person to require you to sign this document if you have not been paid the payment amount set forth below. If you have not been paid, use a conditional release form.

Project _____
Job No. _____

The signer of this document has been paid in full for all labor, services, equipment, or materials furnished to the property or to _____ (person with whom signer contracted) on the property of _____ (owner) located at _____ (location) to the following extent: _____ (job description). The signer therefore waives and releases any mechanic's lien right, any right arising from a payment bond that complies with a state or federal statute, any common law payment bond right, any claim for payment, and any rights under any similar ordinance, rule, or statute related to claim or payment rights for persons in the signer's position.

The signer warrants that the signer has already paid or will use the funds received from this final payment to promptly pay in full all of the signer's laborers, subcontractors, materialmen, and suppliers for all work, materials, equipment, or services provided for or to the above referenced project up to the date of this waiver and release.

Signature: _____
Date: _____
Company Name: _____
By (w/ title): _____

STATE OF TEXAS §
COUNTY OF _____ §

This instrument was acknowledged before me on this _____ day of _____, 20____,
by _____ (name), _____ (job
title) of _____ (company name).

NOTARY PUBLIC, STATE OF TEXAS

8.0 Change Management ~ (Section 3.4 Exhibit E)

- 8.1 HOUSTON WATERWORKS TEAM reserves the right to make changes in the Work in accordance with Article 7.0, Changes of the General Terms and Conditions. Invoicing for change orders that are not fully executed will not be accepted.

There are 2 methods for requesting change depending upon the criticality to the schedule:

a. Change Order Request form (COR) - Per 8.2 of the subcontract,

Changes that are consistent with the intent of the Subcontract shall be considered within the Scope of Work in the Subcontract and shall be performed by Subcontractor at no additional cost. Changes that Subcontractor considers an increase or decrease in the Scope of Work shall be identified within five (5) working days in a Change Order Request Form (COR) attached hereto as Exhibit C, Attachment C-8-1. The Change Order Request shall identify the change and any cost and/or schedule implications. Subcontractor shall not perform any Work without prior written authorization from HOUSTON WATERWORKS TEAM. Subcontractor shall be reimbursed for authorized changes in such a manner as HOUSTON WATERWORKS TEAM elects and as is described below.

The COR form can be found in the subcontract agreement +/- page 328. COR is to be submitted through Aconex to:

cc: Area Manager (Rich Gomez)
cc: Dept Construction Manager – (Pete Stringer)
cc: Subcontracts Manager – (Jane Summerlin)
cc: Cost Controls Manager – (Scott Cervenka)

- b. **Work Action Directive (Field Work Order)** - If the change is preventing critical work, contact the Area Manager (Rich Gomez) or Dept Construction Manager (Pete Stringer) immediately. They have the ability to authorize proceeding with limitation via Work Action Directive. In this case, HWT will initiate the paperwork. Any Work Action Directive must have daily field reports specific to the Work Action Directive. The daily field reports must include employees, equipment utilized and materials utilized regarding the Work Action Directive.

8.3 Lump Sum

Subcontractor shall price changes to the Work using the same or similar pricing to that provided in this Exhibit C. Backup and substantiation of Lump Sum Changes, including but not limited to, the following supporting documents and/or explanations are to be provided for each COR:

- 8.3.1 *Breakdown of labor-hours, costs of labor, material, equipment, lower tier subcontractors, freight, taxes, and all mark-up percentages.*
- 8.3.2 *The Scope of Work required by the change.*
- 8.3.3 *A cross-reference Field Work Instruction or Request for Information or Document transmittal number, including all drawing numbers, specification references, etc.*

- 8.3.4 *Quantity take-offs.*
- 8.3.5 *A breakdown of new unit prices, if not incorporated in the Subcontract.*
- 8.3.6 *A breakdown of labor-hours, labor-loading, crew sizes, and supervision required to efficiently complete the work required by the change.*
- 8.3.7 *List of equipment and equipment hours to be used for the change.*
- 8.3.8 *Comparison labor-hour loaded construction schedules addressing base bid Scope of Work and base bid with Change Order scope.*

8.4 Time and Material

The materials and equipment cost, equipment rental costs, craft labor cost, and handling charges referred to in this Exhibit C shall apply where applicable to all Changes performed by Subcontractor that are not covered by either a lump sum price adjustment or the unit rate pricing. The pricing shall apply without regard to: (1) the quantities involved to satisfy the requirements of the Subcontract or HOUSTON WATERWORKS TEAM's Construction Manager, (2) the difficulty of performing the Work, (3) the number of hours worked, or (4) the materials and equipment used.

8.5 Unit Pricing

Changes performed by Subcontractor on a unit price basis shall be performed solely on the unit prices set forth in this Exhibit C, Pricing, Payment and Change Management. Said unit prices include individually and in the aggregate all costs associated with this Subcontract change including, but not limited to, furnishing and installing all material, labor, overhead, profit, equipment, hoisting, scaffolding, appliances, permits, insurance, taxes, delivery, and supervision and shall apply without regard to (1) the final quantities required, (2) the difficulty of performing the Work, (3) the number of hours worked, or (4) the materials and equipment used. Unit prices are firm regardless of quantity or complexity of the extra work and are not subject to escalation.

8.5.1 Unit Prices are applicable to both additions and deductions.

8.5.2 Method of measurement and valuation principles shall be as described in Article C.6.

8.5.3 The setting of Unit Prices shall not be construed to require HOUSTON WATERWORKS TEAM to engage Subcontractor to perform the work for which unit prices have been agreed.

Attachment C-8-1 - Subcontract Change Order Request

Request date:		Change Order Request No.:	
Project No.:		Request for Information No.:	
Subcontract No.:		Work Action Directive No.:	
Subcontractor:		Document Transmission No.:	
Scope of Work:			

This COR provides the total costs Subcontractor claims for the change(s) described herein and also identifies the total impact upon the current project schedule or milestone dates. This COR does not change the subcontract requirements until the COR has been approved by HOUSTON WATERWORKS TEAM authorized representatives. Subcontractor may only commence with the Work identified in this COR when signed by three authorized representatives of HOUSTON WATERWORKS TEAM.

Payment for the Work authorized by an approved Change Order Request shall be subject to Subcontractor executing a Change Order to the Subcontract.

DESCRIPTION OF CHANGE	
1.0	SCOPE OF WORK (Exhibit A)
	Provide detailed description of change(s) to the scope of work making reference to the revised information (Documents) that is responsible for the change(s).
	1. 2. 3.
2.0	PRICING, PAYMENT AND CHANGE MANAGEMENT (Exhibit C)
	Provide detailed labor-hours and cost information for the change(s) identified using Subcontract pricing included in Exhibit C-3-1 where applicable
3.0	SCHEDULE INFORMATION
	Provide details, if any, of any changes in the agreed schedule as a result of the change identified.

SUBMITTED BY SUBCONTRACTOR:

Name	Title	Date

FOR HOUSTON WATERWORKS TEAM:

Name	Construction	Date
Name	Commercial Manager	Date
Name	Project Manager	Date
Name	Subcontract Administration	Date

Attachment C-8-2 - Subcontract Change Order

Change Order No.	
Change Order Date	

Subcontract No.		Reference RFI / FWD No(s)	
Subcontractor		Reference COR No(s)	
Scope of Work			

Original Fixed Lump Sum Value	\$
Value of Previous Change Order(s)	\$
Value of this Change Order	\$
Revised Lump Sum Subcontract Value	\$

DESCRIPTION OF CHANGE(S)	
The Purpose of this Change Order is to add/to / delete from / modify the Scope of Work and to amend the Subcontract Price accordingly. The Terms and Conditions governing the original Subcontract and any subsequent Change Orders, not specifically changed herein, remain unchanged and in full force and effect.	
1.0	SCOPE OF WORK (Exhibit A)
	Provide detailed description of change(s) to the Scope of Work
	1. 2. 3.
2.0	PRICING, PAYMENT AND CHANGE MANAGEMENT (Exhibit B)
	Provide detailed labor-hours and cost information for the change(s) identified using Subcontract pricing included in Exhibit B1 where applicable
3.0	SCHEDULE INFORMATION
	Provide details, if any, of any changes in the agreed schedule as a result of the change identified
4.0	DISTRIBUTION
	Please have an authorized representative sign both originals of the Change Order, retain one (1) for your records and return the other to the address shown below within forty-eight (48) hours of receipt of this Change Order. Project Address: Steve.Dicks@newppexpansion.com
ALL OTHER TERMS AND CONDITIONS OF THE ORIGINAL SUBCONTRACT AGREEMENT REMAIN IN FULL FORCE AND EFFECT	

FOR SUBCONTRACTOR:		FOR HOUSTON WATERWORKS TEAM:	
By:		By:	
Name:		Name:	
Title:		Title:	
Date:		Date:	

9.0 Change Management

During the execution of the Work, any changes to the Scope of Work shall be identified and agreed in a formal manner using this Change Management Procedures. Payment for changes in the Work not formally submitted and approved in writing shall not be made. All changes shall be identified using the Change Order Request (COR) Form that is to be reviewed and approved by HOUSTON WATERWORKS TEAM. Approval of the COR allows the Subcontractor to start and complete the work identified. Payment for the Work is authorized by an executed Change Order, attached as Exhibit C, Attachment C-9-1 Change Order.

- 9.1 A COR may be raised by Subcontractor or HOUSTON WATERWORKS TEAM to identify any change in the contracted Work with regard to cost and/or schedule from that originally provided for in the Subcontract. A COR is usually an addition to the Total Subcontract Price, but in some cases, may be a deduction to the Total Subcontract Price.
- 9.2 If HOUSTON WATERWORKS TEAM requires additional Work to proceed prior to an agreement on the COR being reached, that Work should be authorized to proceed, managed, and paid in accordance with the requirements specified in C.6 Pricing for Changes to the Work of this Exhibit C. This measure is for extreme cases where agreement is not imminent due to the amount of preparation required from the Subcontractor, and the work has to proceed so as not to impede the work schedule.
- 9.3 Where provided for, all additional work should be priced as a lump sum based upon the pricing established for the original scope of work. Changes may have already been contemplated and the appropriate unit rate pricing or labor rates identified for the purposes of calculating changes to the work as laid out in this Exhibit C.
- 9.4 In the event the COR is deemed to be within the Subcontractor's existing Scope of Work, the COR shall be returned to the Subcontractor with the appropriate comments and references.
- 9.5 No additional work is to proceed without an **approved** Change Order Request.
- 9.6 Payment for the Work authorized by an approved COR is subject to Subcontractor executing a formal Change Order to modify the scope of the Work in the Subcontract.
- 9.7 Change Orders authorizing payment for approved CORs shall be issued monthly, as requested by Subcontractor.

10.0 Accurate Cost and Pricing Certification

Subcontractor agrees that it is responsible for submitting accurate cost and pricing data to support its Applications for Payment and for COR's under this Subcontract. Subcontractor further agrees that it shall certify that to the best of Subcontractor's knowledge and belief, the cost and pricing data submitted is accurate, complete, and in accordance with the provisions of the Subcontract.

Subcontractor agrees that, if it is later determined by audit or otherwise, that the cost and pricing data submitted were inaccurate, incomplete, or not in compliance with the

provisions of the Subcontract, an appropriate change to the Subcontract Price shall be made.

11.0 Back-charge Procedure

11.1 **Back-Charge Notice.** In accordance with the provisions of General Terms and Conditions Article 4 Subcontract Price, it may be necessary to apply this Back-Charge Procedure. The purpose of the Back-Charge Procedure is to recover costs incurred by HOUSTON WATERWORKS TEAM that are for the Subcontractor's account, including but not limited to:

11.1.1 Providing, correcting, repairing, or replacing permanent materials and equipment set forth in Subcontractor's Scope of Work.

11.1.2 Repairing existing Project site facilities damaged by Subcontractor construction activities.

11.1.3 Providing construction materials, equipment, utilities, and other services, including the unloading and storing of materials and equipment, as set forth in Subcontractor's Scope of Work, but provided by others.

11.2 Notification of Back-Charge

Upon identification of a Back-Charge Condition, HOUSTON WATERWORKS TEAM shall immediately notify Subcontractor's designated representative or, if no onsite representative is present, Subcontractor's home office representative of a back-charge event. Verbal notification shall be confirmed in writing to Subcontractor by a Back-Charge Notice attached hereto as Exhibit C, Attachment C-11-1, Back-Charge Notice. The Back-Charge Notice shall be issued within two (2) working days of the verbal notification. HOUSTON WATERWORKS TEAM shall request Subcontractor's suggested method of handling the back-charge condition, and Subcontractor shall first be given the opportunity to inspect and correct the condition (when possible) within a time period determined to be acceptable by HOUSTON WATERWORKS TEAM.

11.3 Determination of Method of Correction

HOUSTON WATERWORKS TEAM shall evaluate Subcontractor's proposed method of correction, considering whether the proposed technical solution is acceptable and the proposed time to complete can be accommodated by the Project. HOUSTON WATERWORKS TEAM shall select the method of correction most advantageous to the Project and shall notify Subcontractor in writing accordingly.

11.4 Back-Charge Rates

In the event HOUSTON WATERWORKS TEAM determines that the most advantageous method of correction is to have the work done by others on behalf of Subcontractor, the following rates shall apply:

11.4.1 Actual cost of material and supplies, plus **five** percent (5%).

11.4.2 Design engineering, cost plus one hundred and twenty five percent (125%).

11.4.3 Actual cost charged to HOUSTON WATERWORKS TEAM by third parties to perform the required work, plus **five** percent (5%).

11.5 Subcontract Back-Charge Agreement

If the Subcontractor is unwilling or unable to complete the work required in a timely manner that shall support the Project Schedule, HOUSTON WATERWORKS TEAM shall prepare an estimate of charges, if requested by Subcontractor, as soon as possible after the identification of a Back-Charge condition. The absence of an estimate of charges shall not prevent HOUSTON WATERWORKS TEAM from commencing the required work.

If time permits, an attempt shall be made to execute a Back-Charge Notice prior to the start of the work required. If time does not permit, the work shall commence without an executed Back-Charge Notice. Subcontractor's onsite representative shall be given the opportunity to witness the work taking place and review and approve the daily labor and equipment time sheets and material/supply vouchers.

If time did not permit the execution of a Back-Charge Notice prior to the start of work required, the Back-charge Notice shall be prepared and executed as soon as possible thereafter.

11.6 Non-Acceptance of Back-Charge

Failure of Subcontractor to accept a Back-Charge shall not constitute indemnity of Subcontractor nor shall the Back-Charge be voided as a result of Subcontractor's failure to accept the Back-Charge Notice.

11.7 Final Settlement of Back-Charge

The cost of the work incurred under a Back-charge Notice shall be deducted from the Subcontractor's latest monthly invoice after completion of required work or invoiced directly to the Subcontractor.

In accordance with Article 4, Subcontract Price of the Subcontract General Terms and Conditions, retention monies shall be withheld until all Back-Charges have been resolved to the satisfaction of HOUSTON WATERWORKS TEAM.

Attachment C-11-1 – Back-Charge Notice

HWT-P05NF-0504-LF1-17 Form rev 0 June 17

Date	Subcontract Number	Back-Charge Number	Subcontractor

I	Description of Back-Charge Work:		
	Required completion of Back-Charge work to meet Project Schedule: _____		
II	Pricing Basis (check applicable basis):		
	Agreed lump sum price of \$ _____ OR Actual incurred cost, plus mark up in accordance with Part III below. Estimated to be \$ _____		
III	In accordance with Exhibit C Section 11.4 Back-Charge Procedure		
	1	Actual cost of material and supplies, plus five percent (5%).	
	2	Design Engineering, cost plus one hundred twenty five percent (125%)	
	3	Actual other costs to HOUSTON WATERWORKS TEAM for HOUSTON WATERWORKS TEAM or others to perform the work described herein plus (5%).	
IV	Confirmation of Verbal Notice to Subcontractor from HOUSTON WATERWORKS TEAM		
	Date and Time Called		Subcontractor Representative called or spoken to.
V	Authorization by Subcontractor: Delete as appropriate		
	(Subcontractor hereby agrees to complete the work described in Part I above by the Completion date stated)		
	OR		
	(Subcontractor understands and agrees that HOUSTON WATERWORKS TEAM shall perform, or cause to be performed, the work described in Part I – Description of Back-Charge work in accordance with the provisions of the Subcontract and that Subcontractor shall compensate HOUSTON WATERWORKS TEAM in accordance with the rates, prices, terms and conditions set forth herein.		
	Signature of Subcontractor Authorized Representative		Date
VI	Completion of the work required by this Back-Charge Notice:		
	HOUSTON WATERWORKS TEAM confirms that the work described in Part I herein is now considered complete		
	Signature of HOUSTON WATERWORKS TEAM Authorized Representative		Date
VII	Final Back-Charge Value:		
	HOUSTON WATERWORKS TEAM confirms that in accordance with this Back-Charge Notice the Subcontractors work described in Part 1 herein has been completed by others, and in doing so, has incurred costs in the total amount of (\$ _____), which shall be back-charged to the Subcontractor in accordance with the provision of the Subcontract.		

Subcontract No.: 697592-4010
Subcontract Title: EWP4 – 108in Transmission Mains



END PRICING, PAYMENT AND CHANGE MANAGEMENT, Exhibit C

Exhibit D - Schedule

1.0 Purpose

This Exhibit D outlines general schedule commitments made by HOUSTON WATERWORKS TEAM and Subcontractor for executing the Work.

The schedules and commitments will form the basis for detailed schedule development in the early stages of the project. Detailed schedule requirements to be maintained during project execution of the Work are detailed in Exhibit E: Project Controls.

2.0 Responsibilities

- 2.1 HOUSTON WATERWORKS TEAM is responsible to execute the project in accordance with the HOUSTON WATERWORKS TEAM Schedule of Milestone Dates as laid out in Attachment D-2-1. It is agreed this document reflects the minimum requirements regarding the timely completion of key milestones for the Work as may be refined during development of the Project Baseline Schedule.
- 2.2 Subcontractor's Schedule of Milestones to execute the Work is laid out in Attachment D-2-2. These dates represent the general schedule commitments of the Subcontractor for the execution of the Work

3.0 Scheduling of the Work

- 3.1 Subcontractor understands that performance of the Work required by this Subcontract is an integral part of the HOUSTON WATERWORKS TEAM's overall Work scope and as such must follow the logical plan and progression of the HOUSTON WATERWORKS TEAM's overall Schedule of Milestones shown in Attachment D-2-1.
- 3.2 Therefore, Subcontractor shall plan and perform its Work in accordance with its Detailed Schedule that conforms with HOUSTON WATERWORKS TEAM's Schedule of Milestone Dates as identified in Attachment D-2-2 of this Exhibit.

4.0 Subcontractor Schedule

- 4.1 Subcontractor agrees that the Subcontractor Schedule of Milestone dates listed in Attachment D-2-2 to this Exhibit identify the major Subcontractor schedule milestone events, identifying start and completion dates, associated with Subcontractors intended performance of the Work.

Attachment D-2-1 – Houston Waterworks Team Schedule of Milestone Dates

	Milestone Name	Milestone Definition	Milestone Date
1	Construction Start	Notice to Proceed	March 7, 2018; actual date will be the date HWT receives Notice To Proceed (NTP) from the City of Houston
2	Work Completion	Substantial Completion	no later than thirteen months following the date of NTP.

Attachment D-2-2 – Subcontractor Schedule of Milestone Dates

To be determined

	Milestone Name	Milestone Definition	Milestone Date
1	Mobilization Date		
2	State Work Date		
3	Mechanical or Substantial Completion Date		
4	Final Completion Date		

END SCHEDULE – Exhibit D

EXHIBIT E - PROJECT CONTROLS

1.0 Purpose

This Exhibit E outlines the minimum requirements for Project Controls activities including exchange of information, cost control, planning & scheduling, and progress reporting during the execution of the Work.

Subcontractor's Project Controls and Coordination Procedures shall provide the information and reports in the manner specified herein. HOUSTON WATERWORKS TEAM, at its sole discretion, reserves the right to modify reporting requirements herein where additional information may be required by HWT Project Controls.

The reports to be presented by Subcontractor shall ensure that HOUSTON WATERWORKS TEAM is in possession of the latest and the most up-to-date current progress information available to assess the Subcontractor's performance. The reports will also be used to provide the HOUSTON WATERWORKS TEAM the overall Project completion status and provide indicators to the HOUSTON WATERWORKS TEAM if adverse situations are developing.

References to costs, expenditures, cash flow, etc. are referring to Project "invoice" figures and progress metrics, and not Subcontractor's internal data for cost reporting.

2.0 Responsibilities

Please refer to contract specifications outlining responsibilities and deliverable from Subcontractor for schedule and project controls reporting and measurement deliverables including but not limited to 0330 and 01326.

2.1 Subcontractor

The Subcontractor Level 2 Milestone Schedule for the completion of the Work is included in Exhibit D: Schedule. Subcontractor is responsible to further develop its schedule and for the preparation and development of all Project Control documents as outlined herein this Exhibit E.

Subcontractor shall submit all field reports to the HOUSTON WATERWORKS TEAM Area Manager and Project reporting to Project Manager / Project Controls Manager, in addition to loading to the document controls communication portal HWT.DCM@newppexpansion.com. Subcontractor is required to keep current and modify its schedules and reports without cost impact. HOUSTON WATERWORKS TEAM reserves the right to request additional specific reporting (reoccurring or single focus reporting) to advance the progress of the construction, report on certain cost components, or earn value measurement(s).

Failure by Subcontractor to provide HOUSTON WATERWORKS TEAM with the required reports and data in a timely manner shall be grounds for withholding payment until the required reports and data are submitted. Continuing Reoccurrence of inaccurate or late reporting shall be considered a breach of contract and shall initiate corrective actions as provided for in this subcontract.

2.2 HOUSTON WATERWORKS TEAM

The HOUSTON WATERWORKS TEAM Project Level 2 Schedule or Milestone Schedule for the completion of the Work is included in Exhibit D: Schedule and outlines HOUSTON WATERWORKS TEAM schedule obligations to complete this project.

Subcontractor rules of credit shall be submitted for review and acceptance by the HOUSTON WATERWORKS TEAM at the time of award. This document may be modified during the execution of the work as mutually agreed between the Subcontractor and HOUSTON WATERWORKS TEAM.

HOUSTON WATERWORKS TEAM will furnish Subcontractor with the Work Breakdown Structure.

3.0 Project Plan Controls

3.1 Organization and Responsibilities

3.1.1 Organization

Subcontractor is required to describe its Project Controls organization, its relationship within the Subcontractors Project Site team, and its relationship to the corporate organization.

Subcontractor will assign qualified and experienced Project Controls Personnel to the Project. The Project Controls Manager, Lead Cost Controller, and Lead Scheduler shall be experienced in the systems that are to be used on the project and shall be subject to review and acceptance by HOUSTON WATERWORKS TEAM. The Subcontractor shall not remove or replace approved Project Controls Personnel without prior written approval from HOUSTON WATERWORKS TEAM.

3.1.2 Responsibilities

Subcontractor shall provide a description of the duties of each individual assigned to Project Controls

3.2 Procedures

Subcontractor shall submit to HOUSTON WATERWORKS TEAM, for review and approval written Project Controls Procedures that detail the project control methods to be used to plan and schedule the Work, accurately status the progress the Work against the agreed schedule, report earned value, labor progress, resources deployed, materials management onsite, fabrication reporting, and report cost status in an accurate and timely manner. This submittal shall occur within ten (10) calendar days of the execution of the Subcontract.

The Project Control Procedures shall address as a minimum the following topics:

3.2.1 Overall Project Controls

The Overall Project Controls procedure shall identify the sources of Project Control information and the method of how cost including schedule of values, planning and scheduling, and change control information will be managed and communicated.

The procedure should clearly identify how changes to the original execution plan are identified and how corrective action will be initiated when required. This description will include information/responsibility flow diagrams showing formal

communication paths between Subcontractor's Project Controls Manager, cost and schedule control functions.

The method and timing of incorporation of Project changes and extra work (if any) into the schedule, progress measurement system, and cost control shall be described in narrative form.

Subcontractor shall outline its change management processes and then meet with the HOUSTON WATERWORKS TEAM to refine the specific procedures. Please note that the HOUSTON WATERWORKS TEAM reserves the right to modify the change management process and information required.

3.2.2 **Planning & Scheduling**

The Planning & Scheduling procedure shall describe the approach to the detailed CPM scheduling activity reflecting the key functions, sources of data, and resource loading for each activity used in the schedule development.

The procedure should clearly identify the involvement of construction management and supervision to ensure "constructability" of the schedule, construction priorities, and quantification / understanding of critical path and float.

A subcontractor specific schedule of values will be established based upon the base project scope and shall be refined during the first sixty days of the project. The HOUSTON WATERWORKS TEAM may request expanded details during the course of the project, as necessary for clarity of reporting.

3.2.3 **Field Progress Control**

The Field Progress Control procedure should define principles of establishing a schedule of values, progress measurement, description of the progress measurement system, and examples of the deliverables.

The procedure should clearly identify the Subcontractors level of detail (coding), rules of credit and standard work units to be used in the Subcontractors Field Progressing System. **These elements of the system must be approved by HOUSTON WATERWORKS TEAM prior to implementation.** Measurement shall be conducted on a weekly basis, and consolidated on a monthly basis.

3.2.4 **Cost Control**

A procedure is required for reimbursable and T&M components of the Agreement.. The procedure should describe Subcontractor's control of cost budgets, commitments, expenditures and forecasts

3.3 Work Breakdown Structure. (To be determined prior to award)

Following is a typical WBS structure for the work.

		Total Project		
WBS		Area 1	Area 2	Building
Home Office, detail overhead components and allocation methodology				
Mobilization and Demobilization				
Direct Material Supply, detail components				
D I R E C T Labor Work	Discipline			
	Equipment			
	Civil			
	Structural Steel			
	Architectural			
	Piping			
	Electrical			
	Instrumentation			
	Painting			
	Insulation			
Indirect Labor Work				
Indirect Materials				
Construction Equipment & Supplies				

3.4 Incorporation of Changes

The management of changes shall be governed by Exhibit C: Pricing, Payment, and Change Management.

From a Project Controls perspective, changes shall be controlled as follows:

3.4.1 Proposal for Change

Subcontractor's Change Order Request (COR) shall indicate the Work affected and proposed changes in cost, time and resources.

3.4.2 Incorporating Changes

Changes to the scope of work will be identified as a change to the base scope of work, therefore, modifying components of the schedule, resource loaded progress curves and progress measurement system shall be made to reflect any change. Subcontractor, with approval from HOUSTON WATERWORKS TEAM, will determine if the additional scopes become part of the base scope of work schedule or should be controlled individually outside the base scope of work.

When a COR is approved and Subcontractor is authorized to proceed with changes in the Work by HOUSTON WATERWORKS TEAM, Subcontractor shall revise all project control systems affected by the change on the next status update after receipt of the notification to proceed. Approved Change orders shall be presented in the Schedule of

Values (SOV) in a separate section at the bottom of the reporting and note the WBS to be assigned.

3.5 Reporting

Subcontractor shall submit regular status reports in the format attached (NEWPP Contractor Weekly Summary Progress [\(NEWPP – Weekly Summary Facility Progress Report\)](#) and in accordance with the Project Reporting Calendar and in the frequency as defined in “5.0 Instructions for Scheduling” herein. All reporting requirements will be discussed in detail at the Kick-Off Meeting prior to commencing with the Work.

Subcontractor shall submit to HOUSTON WATERWORKS TEAM, for review and approval, a written detailed description of its proposed report layouts and the frequency and timing of each report. Sample Reports are due for review by HOUSTON WATERWORKS TEAM within ten (10) days of execution of the Subcontract.

The following table shows a summary of Project Control reports and required frequency.

Report	15 Days after award	30 Days after award	Monthly	Weekly	Daily
Monthly Progress Status Report (CPM P6 Schedule)			X		
Three (3) Week Look-ahead Work Activity Schedule				X	
Resource Loaded Progress Curves *as required			X	X*	
Progress Reports (narrative). Refer to sample progress report format provided for minimum desired specification. The progress report to be supplied at a summary level and a detail break out level.			X		
Schedule of Values			X		

Two (2) legible size copies and one (1) electronic copy shall be submitted for each report

The **Weekly Progress Reports** shall be submitted to the Project Procurement Manager by 10:00 a.m. each Monday for the previous week. The Monthly Progress Reports shall be submitted as part of the Monthly Project Status Report and provided to the Construction Area Manager and Project

Controls Manager. All reports shall be transmitted to document controls in accordance with Submittal Procedures, Section 01330.

3.6 Software

Subcontractor shall use Primavera P6 for Windows for CPM scheduling and shall submit all schedules in this format and utilizing the defined WBS structure. Version requirements will be communicated by HOUSTON WATERWORKS TEAM and must be followed during the execution of the project.

4.0 Instructions for Monthly Report

Subcontractor's Monthly Project Status Report shall be a comprehensive report of Subcontractor's current work status, concerns, and solutions.

4.1 Monthly Status Report Content

The Monthly Project Status Report shall contain as a minimum the following sections and note deviations to plan:

- A Progress Report (Narrative) Report shall be prepared in summary and detail, and including but not be limited to a description of the current status, problem areas (current and anticipated), delaying factors and their impact, and an explanation of corrective actions taken or proposed. The detail of reports shall be further defined by Houston Waterworks Project Controls, and may be revised to include expanded details necessary for tracking project activities, scope of work, and progress.
- Sample Summary Progress Report is provided (See attachment E-1 NEWPP Contractor Weekly Project Summary Progress Report). Other detail reports will be required as determined by the team after contract award.
- Safety Report.
- Contract Status Report.
- Schedule of Milestones
- Management Summary Schedule.
- Manpower and Resource Loaded Progress Histogram Curves (with numerical text box).
- Resource manpower by subcontractor and craft, equipment, metrics (i.e.: weld inches)
- Schedule of Values Report.
- (detail and summary), including earn value measurement or allocation methodology.
- Material Status Report.
- Material delivery on-site and warehoused, contractor supplied equipment
- Commodity progress for each discipline (i.e., cubic yards of concrete, tons of steel, linear feet of pipe details -fabrication status & installation)
- Progress Status Report (CPM P6 Schedule)

4.2 Issue Due date

The Monthly Status Report is due within six (6) calendar days (generally Monday afternoon) after the monthly close data date following the Project's schedule. The project "month ending data date" is the last Friday of each respective month relative to all monthly communications, progress, reporting and measurement periods.

5.0 Instructions for Scheduling

5.1 Milestone Control

The Project Milestone Schedule supplied by HOUSTON WATERWORKS TEAM to Subcontractor shall be used by Subcontractor to establish all interrelating activities. All Subcontractor's activities shall be scheduled within the start and finish dates established by the Project Milestone Schedule. Subcontractor shall notify if any planned or forecasted activities are in conflict with the Project Milestone Schedule

Subcontractor shall cooperate and coordinate its work with other subcontractors operating in the plant, including common workspaces, so that the project may be performed efficiently by all participants.

5.2 Scheduling

5.2.1 CPM Scheduling

Subcontractor shall provide to HOUSTON WATERWORKS TEAM for review a fully detailed CPM schedule depicting all pertinent activities, interrelationships, and resources necessary to complete the intermediate and final completion milestones defined in Exhibit D. This will be provided in hard copy, electronically and the native Primavera .XER file. The schedule is required to assure adequate planning and execution of the Work and to assist Subcontractor in appraising the reasonableness of the proposed schedule and evaluation of the progress of the Work.

Diagrams shall show the order of Subcontractor's activities, and the sequence in which the work is to be accomplished as planned by Subcontractor. The basic concept of a network analysis diagram will be followed to show how the start of a given activity is dependent on the completion of preceding activities and its completion restricts the start of following activities.

The contractor shall provide monthly an executive written summary of schedule changes, critical path modifications, significant deviations, critical actual progress to plan variances, and area work front summary.

5.2.2 Construction and Supporting Activities

Schedule activities shall include, where required; detailed engineering design including issued for construction issue drawings and specifications, the procurement of critical materials and equipment, and their fabrication (including detail modular fabrication), delivery and testing of equipment construction sequencing and events, construction sequencing and events. Contractually-required dates for completion of all or parts of the Work will be shown. Key construction dates should be included in the schedule. The selection and number of activities shall be based on typical work packages and subject to HOUSTON WATERWORKS TEAM's review. Each activity shall have duration in work days, sufficient enough to define a specific task. No activity will be more than 20 (twenty) working days without the approval of the HOUSTON WATERWORKS TEAM. All contractual milestones shall be reflected on the schedule.

5.3 Target Baseline

Subcontractor is required to develop and issue for approval a resource loaded Baseline Schedule within the Project Milestone Dates illustrating original plan for all activities. This Baseline shall be shown in all subsequent issues of the schedule. This Baseline Schedule will be submitted for approval to HOUSTON WATERWORKS TEAM no later than 15 working days after Subcontract award.

Subcontractor shall not revise Project Milestone Dates or reschedule the Work without prior written approval from HOUSTON WATERWORKS TEAM.

5.4 Incorporation of Changes

5.4.1 Proposal for Change

Subcontractor's proposals for all changes shall indicate the activities affected, activities added or deleted and proposed changes in time and duration estimates for each activity. A subnet shall be submitted with each change proposal showing all impacts to the schedule as a result of the change. Any schedule delay proposed must be submitted within five days of critical path perceived occurrence, Houston Waterworks will respond to the perceived occurrence within 10 working days thereafter.

5.4.2 **Incorporating Changes**

Upon receipt of written notification to proceed with changes in the Work, Subcontractor shall revise the network logic, time and duration estimates of all activities affected by the change on the next status update after receipt of the notification to proceed.

5.5 **Project Controls Deliverables**

5.5.1 **CPM Schedule**

The CPM schedule shall be submitted to HOUSTON WATERWORKS TEAM.

5.5.1.1 **Management Summary Schedule**

Consisting of major milestones, discipline summary bars, and an overall project bar.

5.5.1.2 **Work Package Summary Schedule**

Consisting of (rollup) of activities within the detailed schedule.

5.5.1.3 **Detailed CPM Schedule**

Fully detailed and resource-loaded CPM schedule defining all work elements in accordance with accepted scheduling practices.

The following information shall be provided as a minimum for each activity:

- Preceding and succeeding activity event numbers
- Activity description
- Estimated duration of activities (in work days)
- Earliest start date (by calendar date)
- Earliest finish date (by calendar date)
- Actual start date (by calendar date)
- Actual finish (by calendar date)
- Latest start date (by calendar date)
- Latest finish date (by calendar date)
- Lag or float in calendar days
- Activity percent complete activity
- Manpower resources required to complete each activity
- Critical path report showing total float from 0 to +10 days

5.5.1.4 **Resource Histograms**

Subcontractor shall prepare resource histograms based on the CPM Schedule. For details refer to "Instructions for Resource Loaded Progress Curves".

5.5.1.5 **At Time of Award**

Subcontractor's Level 2 schedule in accordance with Project Milestone dates and an adequate amount of schedule detail to demonstrate a sufficient knowledge of the work scope shall be agreed prior to award and made part of this Subcontract.

5.5.1.6 Issue After Contract Award

Subcontractor shall submit a P6 CPM network schedule within ten (10-) working days of Contract award. This schedule will cover the first 90 days of the project. Subcontractor shall further develop the P6 schedule which will cover the entire project duration within 30 working days of Subcontract award. HOUSTON WATERWORKS TEAM also has the option to require further detail as needed to facilitate accurate Project status.

5.5.1.7 Revisions

Subcontractor shall participate in a review and evaluation of the proposed network diagrams and analysis with HOUSTON WATERWORKS TEAM. Network diagrams and analysis, including revisions, shall be resubmitted for approval to HOUSTON WATERWORKS TEAM within five (5) working days of the review. The approved network analysis shall be used by Subcontractor for planning, organizing, and directing the Work, and reporting the progress.

If Subcontractor's operations at any time differ significantly from those indicated in the approved network, Subcontractor shall revise the schedule to incorporate the revised logic necessitated by changes in Subcontractor's operations with appropriate documentation describing these variances. The decision that Subcontractor is not operating to its approved logic to warrant such revision shall be at HOUSTON WATERWORKS TEAM's sole discretion. Any revision must be approved by HOUSTON WATERWORKS TEAM.

5.6 Subcontractors Scheduled Recovery Requirements

- 5.6.1 A recovery schedule shall be prepared and submitted by Subcontractor when weekly trend information indicates that due to the Subcontractors to-date progress, (1) Subcontractor is not progressing their work in accordance with Subcontractor's approved base line schedule commitments, (2) other Project participants are being impacted by deficiencies in Subcontractors performance, (3) corrective action is required/justified based on HOUSTON WATERWORKS TEAM's recognition that Subcontractor's contractually agreed upon commitments may not be met.
- 5.6.2 HOUSTON WATERWORKS TEAM shall notify Subcontractor in writing that a recovery schedule is required to be submitted for HOUSTON WATERWORKS TEAM's review.
- 5.6.3 Subcontractor's Recovery Schedule narrative shall be submitted and it shall identify the steps required by Subcontractor to mitigate the impact of Subcontractors performance to the overall project. Changes in schedule logic, work sequence, shift work, manpower levels, and work days all shall be considered by Subcontractor when developing Subcontractor's Recovery Schedule.
- 5.6.4 HOUSTON WATERWORKS TEAM shall coordinate a review meeting with the Subcontractor to evaluate the submitted recovery schedule. The Subcontractor shall make adjustments as agreed upon in the review meeting and re-issue the recovery schedule back to the HOUSTON WATERWORKS TEAM.
- 5.6.5 The recovery schedule shall be submitted by the Subcontractor within seven (7) calendar days from issuance of written notice by the HOUSTON WATERWORKS TEAM. HOUSTON WATERWORKS TEAM shall coordinate a review meeting with the Subcontractor within two (2) working days of receipt of the recovery schedule. Subcontractor shall incorporate any necessary changes resultant of the review and re-submit to the HOUSTON WATERWORKS TEAM within two (2) working days.

5.7 Status Update

- 5.7.1 Subcontractor shall measure progress in the Work weekly submit a maximum of every fourteen (14) calendar days an electronic version of a report of the actual construction activities. The report shall show the activities or portions of activities completed during the reporting period. The report will state the percentage of the actual work completed and the progress along the critical path in terms of days ahead or behind the allowable dates.
- 5.7.2 If the project is behind schedule, Subcontractor shall also submit a narrative report with the updated analysis which shall include but not be limited to a description of the problem areas (current and anticipated), delaying factor their factor, their impact, and an explanation of corrective actions already taken or proposed to be taken.
- 5.7.3 **Three (3) Week Look-ahead Work Activity Schedule**
Subcontractor shall submit weekly a three-week look-ahead schedule on the form provided by HOUSTON WATERWORKS TEAM. This schedule will reflect actual progress for the previous week's activities, the current week scheduled activities, and a two week look ahead of future activities.

6.0 Instructions for Resource loaded progress curves

6.1 Baseline Curve

The baseline for resource loaded progress curves shall be prepared from the resource loaded target baseline CPM. Resource loading shall be checked each week.

6.2 Incorporation of Changes

6.2.1 Proposal for Change

Subcontractor's COR's shall indicate the crafts affected, manpower increases or reductions, and proposed changes in time for each curve.

6.2.2 Incorporating Changes

When a COR is approved, Subcontractor shall revise the forecast elements of the resources loaded progress curves affected by the change on the next status update.

The Baseline Plan shall not be replaced with a new plan or the plan be revised without the prior agreement of HOUSTON WATERWORKS TEAM.

6.3 Project Controls Deliverables

6.3.1 Resource Loaded Progress Curves

6.3.1.1 Format

Consistent with the Work Breakdown Structure, the curves shall be set up by major area or location (e.g. Influent Pump Station). As a minimum, the curves shall be set up in the HOUSTON WATERWORKS TEAM's discipline structure for the direct and indirect portion of the work.

The curves are graphical representations of the plans, actual status, and forecast; by week and by month for the duration of the Subcontract. The curves shall contain resource and progress elements.

Each curve shall contain scheduled (baseline or target plan), actual, and forecast data; incremental for the periods as well as cumulative to date (progress only).

6.3.1.2 Baseline Issue After Contract Award

Subcontractor shall submit within fifteen (15) working days after Contract award, resource loaded progress curves including total project and, as a minimum the discipline-based curves in accordance with the work breakdown structure elements.

6.3.1.3 Target Update

The baseline or target curves shall be updated on HOUSTON WATERWORKS TEAM instructions only and shall be submitted the week after the receipt of this instruction.

6.3.1.4 Status Update

The curves shall be based upon the approved Baseline Schedule and issued every week and every month to reflect current status (actual) and the remaining work to complete (forecast). The actual progress shall be calculated following the Instructions for Field Progress Measurement.

If the resource loading or the progress is behind schedule, Subcontractor shall also submit a narrative report with an analysis which shall include but not be limited to a description of the problem areas (current and anticipated), delaying factors and their impact, and an explanation of corrective actions taken or proposed.

7.0 Instructions for Field Progress Measurement

Subcontractor shall provide HOUSTON WATERWORKS TEAM with actual progress of the Work in accordance with the following instruction. Actual field progress measured via this method may be used for progress payments. Refer to Exhibit C: Pricing, Payment, and Change Management for payment details. HOUSTON WATERWORKS TEAM reserves the right to audit / field validate the field progress measurement system and the Subcontractor is required to implement corrective action as deemed necessary by HOUSTON WATERWORKS TEAM.

Definitions:

Forecasted Issued for Construction (IFC) quantities: The quantities that reflect the total, as designed, Subcontractor's scope of work.

Standard Work Units: The weighting factor for progress measurement. Each IFC quantity will receive the listed Standard Work Units for progress measurement weighting purposes. The standard work units require approval by HOUSTON WATERWORKS TEAM and shall not be revised without prior approval by HOUSTON WATERWORKS TEAM.

Total Work Units = Forecasted IFC Quantities * Standard Work Units

7.1 Progress Measurement

Progress, in the form of percent complete, is the basis for calculating progress-based earned work units. Progress is determined by breaking the overall scope into specific construction tasks and assigning percentages to these tasks via established rules of credit. These rules of credit must be approved by HOUSTON WATERWORKS TEAM.

Percent Complete = by Rule of Credit

Earned Work Units = Percent Complete * Standard Work Units (By Account Breakdown)

Total Progress = Sum (Earned Work Units) / Total Work Units *100%

Subcontractor shall perform progress measurement on a weekly basis and shall consolidate monthly for reporting purposes.

7.1.1 Identify Tasks

Tasks in sufficient level of detail shall be used to define the work in objective measurable units to facilitate progress measurement. An IFC quantity shall be defined

for each task. Typical examples of tasks are: installation of individual pieces of equipment, pouring of individual foundations, etc.

7.1.2 Measure Actual Progress

Percent complete shall be determined using the “Units Completed” or “Incremental Milestones” method.

7.1.2.1 Units Completed

This method applies to those tasks that are normally started and complete in the same period, such as piling installation. For these items, all work units for the specific deliverable is normally earned in it's entirety when the task is completed.

Include expanded details necessary for tracking project activities, scope of work, and progress. Resource manpower by subcontractor and craft, equipment, metrics (i.e.: weld inches). Including earn value measurement or allocation methodology. Commodity progress for each discipline (i.e., cubic yards of concrete, tons of steel, linear feet of pipe details -fabrication status & installation)

7.1.2.2 Incremental Milestones

This method applies to those tasks that have durations exceeding one or more reporting periods, and which can be readily broken down into multiple sub-tasks that can themselves be individually measured. This includes certain construction tasks such as foundation installation, equipment installation, etc. For these items, each subtask is considered to be a milestone which carries a pre-defined portion of the overall deliverable work unit budget. When all milestones are completed, the entire work unit budget is earned. For major efforts, credit may be taken for partial completion of milestones if the impact on progress is significant.

7.1.2.3 Calculate Earned Value Measurement Work Units

Progress Based Earned Work Units shall be calculated as percent complete times the respective Target Work Units for the task.

7.2 Incorporation of Changes

7.2.1 Incorporating Changes

When a notification to proceed with changes in the Work is received by Subcontractor from HOUSTON WATERWORKS TEAM, Subcontractor shall update the Forecasted IFC Quantities and the Target Work Units that are affected by the change during the next status update after receipt of an approved COR.

8.0 Instructions for Cost status reporting

SECTION 8 DESCRIBES THE MINIMUM REQUIREMENTS FOR COST CONTROL FOR REIMBURSABLE OR T&M COMPONENTS OF THE AGREEMENT. SUBCONTRACTOR SHALL CONTROL AND REPORT THE MAIN ELEMENTS OF COSTS AS DEFINED BY HOUSTON WATERWORKS TEAM. THE COST BREAKDOWN STRUCTURE WILL BE AS DEFINED BY THE SUBCONTRACTOR AND REQUIRES APPROVAL OF HOUSTON WATERWORKS TEAM. CONTRACTOR SHALL PROVIDE ALL DELIVERABLES AS NOTED COLLECTIVELY HEREIN, PROVIDE COST BREAKOUT SUFFICIENT TO FULLY UNDERSTAND COST REPORTING, EARN VALUE, AND INVOICE SUPPORT.

Cost Categories and Definitions

8.1 Home Office Costs

Labor expenditures (1.1): Number of billable hours worked and associated costs in accordance with the Subcontract provisions.

Contract commitments (1.2): Listing of billable third party or purchase orders and associated purchase order values.

8.1.1 Subcontractor Furnished Materials Costs

Direct material commitments (2.1): Listing of billable purchase orders and purchase order values for direct materials. Detail material supplier Fabrication logs are to be provided every two weeks.

8.1.2 Field Labor Costs

Direct labor expenditures (3.1): Number of direct billable hours, manpower FTEs, subcontract staff vs. worked craft worked, with the associated costs in accordance with Exhibit C: Pricing, Payment and Change Management.

Direct lower tier subcontract commitments (3.2): Listing of lower tier subcontracts and associated subcontract values for direct subcontracts.

8.1.3 Field Indirect Costs

Indirect material commitments (4.1): Listing of billable purchase orders and purchase order values for indirect materials.

Indirect labor expenditures (4.2): Number of indirect billable hours worked with the associated costs in accordance with Subcontract Provisions.

Indirect subcontract commitments (4.3): Listing of subcontracts and associated subcontract values for indirect subcontracts.

Construction management expenditures (4.4): Number of construction management billable hours worked with the associated costs in accordance with Subcontract Provisions.

Rental expenditures (4.5): Listing of all billable rental contracts and current period cost status.

8.1.4 Associated Costs

Insurances (5.1): Listing of billable insurances.

Fees (5.2): Value of earned fees in accordance with Subcontract Provisions.

Markups (5.3): Value of earned mark-ups in accordance with Exhibit C: Pricing, Payment and Change Management.

Mobilization and Demobilization Costs

Subcontractor will separately present the cost mobilization to site and the cost for demobilization from site. These specific costs will be presented in the schedule of values (SOV), P6 schedule, and cost loaded schedule in support of the Subcontractor monthly invoice

8.2 Project Controls Cost Report

8.2.1 Monthly Cost Status Report

Subcontractor shall prepare a Monthly Cost Status Report. The Monthly Cost Status Report shall show in tabular format the summary of commitments and expenditures per main component of cost. Supporting tables shall show the detailed information that was used to prepare the summary table. The Project Cost Status Report with supporting tables shall be submitted by the 6-th of each month ending data date. .

END OF PROJECT CONTROLS – EXHIBIT E

EXHIBIT F – Quality Assurance/Quality Control

1.0 General

- 1.1 Subcontractor is required by the Project Quality Plan to have and submit for approval a Site-Specific Quality Control Plan to fulfill the quality requirements of this Subcontract. This plan shall identify the required meetings and coordination with the HOUSTON WATERWORKS TEAM inspection staff and the third-party Testing Laboratory, and fully meet the requirements of
- 1.2 Subcontractor's Quality Assurance/Quality Control Program shall describe the Quality Systems used to control its Work. The Subcontractor shall execute the scope of work using the approved Quality Program that shall include written procedures and work instructions that describe the work process for controlling and assuring the quality of the deliverables associated with engineering design, manufacturing process where applicable, and the construction/installation process. The Subcontractor's proposed Quality Program is required to be submitted to HOUSTON WATERWORKS TEAM within 30 days of Subcontractor's Notice to Proceed. Payment is subject to the Subcontractor's Quality Program being approved by HOUSTON WATERWORKS TEAM and being applied by Subcontractor.
- 1.3 The Quality Plan shall define the Subcontractor's quality system, activities, procedures, practices, resources and associated responsibilities under this Subcontract.
- 1.4 Reserved
- 1.5 Subcontractor shall assure that the installed Work complies with the the specifications, drawings, codes and standards referenced in this Subcontract. Subcontractor shall provide HOUSTON WATERWORKS TEAM with timely notification and access for all inspection necessary to validate the quality of the Work installed by Subcontractor as well as access to the records maintained of any inspection work completed by Subcontractor.

The Subcontractor shall provide HOUSTON WATERWORKS TEAM and its representatives with access to their, or, their suppliers or lower-tier subcontractor's facilities, work processes, equipment, personnel, procedures and records for the purpose of conducting reviews, inspections, surveillance, or audits of Project materials and equipment to verify compliance with the technical requirements of this Subcontract.

- 1.6 Subcontractor shall provide sufficient supervisory and quality control staff to implement and control a proactive Quality Assurance/Quality Control Program. Requirements for the program are further defined in the Contract Specifications.

The Subcontractor shall include in the field staffing a dedicated, full-time QA/QC Manager whenever Subcontract values are in excess of ten million dollars (\$10,000,000). The Subcontractor shall submit the résumé of the QA/QC Manager to HOUSTON WATERWORKS TEAM for approval within 30 days of the Subcontractor Notice to Proceed. The Subcontractor shall not remove or replace HOUSTON WATERWORKS TEAM approved QA/QC Manager without prior written approval from HOUSTON WATERWORKS TEAM.

Non-Destruction Examination (NDE) will be provided by a third-party Testing Laboratory as identified in the Contract Documents. Subcontractor shall coordinate their activities for testing with HWT and the Testing Laboratory so that an orderly progression of the Work can be maintained. Scheduling of the Testing Laboratory shall be maintained with 24-hour advance notice of any Work requiring testing. For Work after normal Work hours identified in Exhibit I: Project Work Rules and Site Conditions, on weekends, or Holidays, Subcontractor shall provide written notice to the Testing

Laboratory and HOUSTON WATERWORKS TEAM 48-hours prior to the Work requiring testing. Testing Laboratory will make every effort to coordinate and cooperate with the Subcontractors construction activities.

- 1.7 Should any Work be performed without giving timely written notice for HOUSTON WATERWORKS TEAM to provide such inspections and testing, HOUSTON WATERWORKS TEAM may require Subcontractor to uncover such Work, at Subcontractor's cost, for examination.
- 1.8 Testing Laboratory
 - 1.8.1 Testing Laboratory shall provide duplicate original copies of all test results and supply test results simultaneously to HOUSTON WATERWORKS TEAM and Subcontractor.
 - 1.8.2 Testing Laboratory shall email material supplier, Subcontractor, lower tier Subcontractors, and HOUSTON WATERWORKS TEAM reports that indicate failing test results by no later than close of business on the working day following test completion and review
- 1.9 Subcontractor shall remain totally responsible for the quality and accuracy of its Work that shall at all times conform to Project requirements. In the event that the results of tests performed are not in accordance with Project requirements, Subcontractor shall be responsible for any repair, rework, re-testing and/or additional testing required as a result of the Work not being compliant with Project requirements. The costs associated with any repair, rework, re-testing, and/or additional testing required as a result of the Work not being compliant with Project requirements shall be to Subcontractor's account.
- 1.10 HOUSTON WATERWORKS TEAM shall initiate a Pre-Mobilization/Kick-Off Meeting with project personnel to ensure the Subcontractor has the proper Personnel onsite. The project specifications and procedure requirements shall be reviewed during this meeting along with discussing HOUSTON WATERWORKS TEAM expectations.

2.0 Quality Plan

2.1 The Subcontractor's Quality Plan shall include but not be limited to:

- Policy Statement and letter of authority to Quality Manager signed by an official of the company
- Organization Chart - including lines of authority, qualifications in resume format, and a QA/QC Staffing Plan
- Roles and Responsibilities of each person assigned to Quality Control Coordination and interaction with the Design-Builder's inspection staff
- Coordination and interaction with the third part Testing Laboratory
- Procedures for tracking deficiencies through the procurement and supplier control process
- Material Control Procedures for tracking deficiencies through the resolution Process for Quality Issues
- Material Traceability
- Subcontractor's Inspection and Testing Plans for execution of work elements
- Equipment and Material, Receipt Inspection, Storage, Maintenance and Preservation
- Records control and updating the as-built documents
- Procedures for scheduling, reviewing, certifying, and managing submittals
- Procedures for tracking preparatory, initial and follow-up control phases of quality inspection for corrective and preventive actions
- Internal and External Quality Audits and coordination with the PMT
- Reporting procedures, including proposed reporting formats; include a copy of the SQC daily and monthly report form

- 2.2 The Subcontractor's Quality Plan shall be submitted to HOUSTON WATERWORKS TEAM for review/comment/approval within thirty (30) calendar days of the Notice to Proceed Date.

3.0 Third-Party Inspection Services

- 3.1 All third-party inspection and testing agencies used by Subcontractor to perform testing identified in Part 2 of Individual Specification Sections must be approved in advance by HOUSTON WATERWORKS TEAM. The Subcontractor designated third party testing shall be qualified to perform testing based on meeting the minimum requirements of the applicable National Codes and Standards. All costs associated with the inspection or testing shall be the responsibility of the Subcontractor.

4.0 Quality Documentation

- 4.1 All completed inspection reports, checklists, certifications, records and any other quality documentation generated by HOUSTON WATERWORKS TEAM for materials, equipment and construction work pertaining to this Subcontract shall be reviewed and where necessary signed by Subcontractor. Subcontractor shall sign all daily inspection reports generated by the HOUSTON WATERWORKS TEAM inspection staff. Signed documentation and records of all inspection and testing activities shall be completed at the time the activity is performed and shall be kept in the Project file.
- 4.2 HOUSTON WATERWORKS TEAM reserves the right to institute an electronic Project Management Information System (PMIS) in support of the inspection and testing program. Subcontractor shall cooperate fully with the implementation of the PMIS including review and response to issues generated by inspection staff, non-conforming work notifications, field advisory notices, photos, daily inspection reports, and electronic correspondence. If instituted, Subcontractor Quality Manager shall meet with HOUSTON WATERWORKS TEAM at a frequency identified by HOUSTON WATERWORKS TEAM to discuss quality issues, identify lower-tier Subcontractors responsible for the Work, if any, and establish dates for correction of the Work, when required.
- 4.3. HOUSTON WATERWORKS TEAM reserves the right to institute an electronic inspection and testing record program in support of the inspection and testing program. The program may include the use of field tablets for inspection and testing. The program will include the participation of the third party construction material testing firm and the special inspection firm used by HWT./

Attachment F-3-1 – Testing and Inspection Log Samples

See attached, Exhibit F-3-1_HWT Inspection and Testing Logs excel form

Exhibit G – Health, Safety and Environmental

1.0 General Conditions

Target Zero is the stated goal of HOUSTON WATERWORKS TEAM and every HOUSTON WATERWORKS TEAM employee is entrusted to take responsibility to achieve zero incidents, including:

Zero Injuries and Illnesses (World Class Safety)

Zero Adverse Impacts (Environmental Stewardship)

A strong and viable Target Zero culture is achieved when employees value health, safety, and environmental (HSE) performance and are prepared to take responsibility for their own behavior and for the behavior of every employee around them. HOUSTON WATERWORKS TEAM expects that its Subcontractors also adopt the same level of commitment to health, safety security and protection of the environment.

Therefore, Subcontractor agrees and accepts the responsibility to work with HOUSTON WATERWORKS TEAM to establish Health, Safety and Environmental (HSE) protection as practiced by HOUSTON WATERWORKS TEAM for its own employees and to comply with Client, State, and Federal Health, Safety, Security and Environmental regulations.

Subcontractor agrees to become part of the Target Zero culture and to participate in project HSE initiatives that shall require the safety leader of the Subcontractor joining the HSE leadership team made up of HOUSTON WATERWORKS TEAM safety representatives and other safety representatives from each subcontractor on site, the intent being to establish and maintain the Target Zero culture on the project site.

Subcontractor shall participate in keeping its work site, and in cooperation with the other subcontractor's, keep the common areas of the work site in a clean and safe condition.

2.0 Safety Protection of Work

Prevention of accidents and adverse environmental impacts on or near Subcontractor's Work is Subcontractor's responsibility. Subcontractor shall take all necessary precautions to assure the safety of all persons and the protection of the environment during performance of Subcontractor's Work and shall protect Subcontractor's Work and adjacent property from damage caused by Subcontractor's operations. Subcontractor shall conform to all applicable laws and regulations relating to health, safety and the environment and with site-specific health and safety plans, and any required environmental plans that are available upon request. Subcontractor shall designate a qualified representative responsible for safety at the Project site.

Subcontractor shall at all times be solely responsible for all aspects of HSE in connection with Subcontractor's Work and any Lower Tier Subcontractor work, including initiating, maintaining and supervising, and complying with all HSE precautions and plans, even if HOUSTON WATERWORKS TEAM establishes an HSE program for the entire Project. Such responsibility includes, without limitation, the obligations set forth in the remainder of this document.

Subcontractor shall perform Subcontractor's Work or ensure that it is performed, in a manner to avoid risk of injury to persons or environmental damage and shall continuously inspect Subcontractor's Work, that includes all of Subcontractor's materials, equipment and lower tier subcontractors, to discover the existence of any conditions that impose a risk of bodily injury or environmental damage.

2.1 Prior to beginning Subcontractor's Work, Subcontractor shall submit for HOUSTON WATERWORKS TEAM's review, a written Health and Safety Plan and any required

environmental plans, with detail commensurate with Subcontractor's Work. Such Plans shall be prepared by an appropriate health, safety or environmental professional and shall describe anticipated hazards, environmental impacts and control methods Subcontractor shall employ to administer a Health and Safety Plan that provides adequate safeguards for all Subcontractor and Lower Tier Subcontractor employees, HOUSTON WATERWORKS TEAM and Owner employees, site visitors, the public and the environment. The Plan's safety measures, policies and standards shall conform to those required or recommended by governmental and quasi-governmental authorities having jurisdiction and by HOUSTON WATERWORKS TEAM and Owner, including, but not limited to, requirements imposed by the Contract Documents. Subcontractor shall conspicuously post the Safety Plan at the Project site. All Subcontractor personnel including sub-tier contractors shall be briefed on the Subcontractor's Safety Plan. This briefing shall be documented.

The Safety Plan must include, at a minimum, the following components:

- 2.1.1 **Training.** Subcontractor is responsible for the safety education of their employees. The training must comply with all laws and standards and include additional health and safety training for site supervision. Training must continue through the term of the Subcontract. Subcontractor shall provide copies of training records to HOUSTON WATERWORKS TEAM for all operations, that require such training. These documents must be submitted prior to performing Subcontractor's Work. Additionally, Subcontractor shall maintain up to date safety training records at the project site or in a manner such that the training records are readily available for inspection. As a minimum, the following training is required:
 - 2.1.1.1 Supervisor Safety Training – must cover record keeping, incident investigation, OSHA inspections, H&S documentation requirements, and the OSHA 10-hour course for construction.
 - 2.1.1.2 Competent Person Training – each person designated as a competent person shall attend training on that specific operation. Operations requiring a competent person or qualified supervisor per OSHA requirements include, but are not limited to, trenching and excavation, fall protection, scaffolds, confined space entry, and rigging.
 - 2.1.1.3 Employee Orientation Training – must cover the applicable HSE policies, manuals, plans and/or Activity or Task Hazard Analyses (AHA/THA), first aid availability, incident reporting procedures, safety meeting participation, personal protective equipment, emergency procedures, and enforcement procedures. HOUSTON WATERWORKS TEAM will provide a project employee orientation and ALL employees must attend the training prior to entering the field. This includes employees working for the subcontractor as well as any lower tier contractor.
 - 2.1.1.4 Emergency Procedures – must cover notification procedures, evacuation routes, mustering points, and accountability
 - 2.1.1.5 Safety Meetings – must be conducted at a minimum weekly during active work operations with all Subcontractor's onsite personnel. Documentation detailing the subject discussed and signatures of all participants must be kept for each meeting.

- 2.1.1.6 Hazard Communication Standard – must cover all aspects of the standard including SDSs, chemicals onsite, labeling and the written program. Annual re-training is required.
- 2.1.1.7 Lockout/Tagout – must cover each individual piece of machinery or equipment that is to be commissioned, serviced or altered during this Project.
- 2.1.1.8 Working Alone – must cover communications, control measures, and emergency procedures for working alone. Working alone includes any task where the risk of injury or illness is increased without assistance or direct communication with other workers located in close proximity, or when working in a remote area without reliable means for summoning emergency support.
- 2.1.2 **Incident Reporting and Investigation.** Subcontractor must report all incidents including injuries, illnesses, exposures above established limits, fires, explosions, spills, exceeding permit or permit-equivalent, near misses, and any property damage to HOUSTON WATERWORKS TEAM immediately (within 1 hour of incident). Significant spills (exceeding Reportable Quantities) must be reported to HOUSTON WATERWORKS TEAM at the moment it is safe to do so due to strict EPA/State 15-minute reporting requirements. An incident investigation that includes a cause analysis and corrective actions must be conducted and a complete report issued to HOUSTON WATERWORKS TEAM within 24 hours of incident. A daily verbal update shall be provided to HOUSTON WATERWORKS TEAM until corrective actions are completed and, if applicable, claimant is released to full-duty and/or claim has been resolved.
- 2.1.3 **Emergency Procedures and First Aid/Medical Services.** Subcontractor shall prepare in-house emergency response guidelines in coordination with HOUSTON WATERWORKS TEAM's safety personnel. Subcontractor must provide first aid and medical service capabilities to meet OSHA requirements.
- 2.1.4 **Record Keeping.** Each Subcontractor shall submit a monthly safety report to HOUSTON WATERWORKS TEAM by the second Friday of the month that covers the previous month's significant safety activities. The monthly report shall include a copy of Subcontractor's Project-specific OSHA 300, current incident statistics (including total Subcontractor and Lower Tier Subcontractor field work hours), any disciplinary actions, near misses, upcoming high hazard work, training records update and any accident investigation reports to HOUSTON WATERWORKS TEAM. Project-specific OSHA 300 and first aid logs must be maintained onsite at all times.
- 2.1.5 **Personal Protective Equipment.** Subcontractor shall provide and inspect all personal protective equipment (PPE) prior to each use. In addition, Subcontractor shall enforce the use of PPE by its employees whenever required or specified in the project health and safety plan. A dress code, including hard hats, safety toed work boots, safety glasses, high visibility warning vests (meeting ANSI/ISEA 107-2004 Class 2 standards), appropriate hand protection (Gloves) and appropriate clothing (long pants and sleeved shirts that must cover torso) is required AT ALL TIMES on the HOUSTON WATERWORKS TEAM project.
- 2.1.6 **Fall Protection.** Subcontractor shall provide and ensure the use of continuous fall protection equipment when activities take place 6 feet or more above ANY lower level.

- 2.1.7 **HAZCOM.** Subcontractor shall provide HOUSTON WATERWORKS TEAM with a copy of the current Safety Data Sheets (SDSs) required by the Hazard Communication Standard for all hazardous chemicals or substances brought onsite by Subcontractor or any lower-tiered Subcontractors. Subcontractor shall maintain all SDSs at the project site in a notebook readily available for inspection with an index arranged by "Brand Name". If such materials or substances are part of any item requiring a shop drawing or other submittal, the SDS shall accompany the submittal.
- 2.1.8 **Hazard Analysis.** Subcontractor shall prepare an Activity Hazard Analysis (AHA) or equivalent for each definable work task comprising Subcontractor's Work identifying the work sequence, hazards posed and control measures required to perform the activity according to accepted industry safe work practices. The equipment, tools and materials, inspection and training requirements to execute Subcontractor's Work activity shall also be included in the AHA. The AHA must be submitted to the HOUSTON WATERWORKS TEAM at least 2 weeks prior to starting the work. A documented review of the AHA is required with employees performing the work. The AHA must be readily available review during the field work.
- 2.1.9 **Pre-Task Safety Plans.** Subcontractor shall prepare a daily Pre-Task Safety Plan (PTSP) or equivalent to review the hazards posed and required hazard control procedures for each day's planned activities. During the daily safety meeting, Subcontractor's supervisor shall brief their work crew on the PTSP. That briefing shall also include the tools, equipment and materials that shall be used for each day's planned activities. The PTSP must be readily available for review by HOUSTON WATERWORKS TEAM upon request and submitted to the HOUSTON WATERWORKS TEAM at the end of each shift.
- 2.1.10 **Safety Inspections.** SUBCONTRACTOR shall conduct and document regular inspections while work is being conducted at the project site for good health, safety, and environmental conditions at the PROJECT site and promptly implement any needed corrective actions. A minimum of one documented inspection shall be conducted per week while work is conducted at the PROJECT site or more frequently if site conditions warrant. In addition, when the subcontractor has more than 25 employees, or at the request of the project safety manager, the subcontractor shall have a manager accompany the HOUSTON WATERWORKS TEAM during a documented safety inspection.
- 2.1.11 **Competent Person.** Subcontractor agrees to provide a competent person onsite at all times during operations that require such according to the OSHA regulations. This person must be experienced in the operation and have received detailed training on the regulations pertaining to the operation. The competent person shall perform a daily inspection of the operation and submit a written inspection report each week to HOUSTON WATERWORKS TEAM.
- 2.1.12 **Housekeeping and Site Services.** Subcontractor is solely responsible for housekeeping in their work areas. Good housekeeping is essential for all work performed at the HOUSTON WATERWORKS TEAM project site. Subcontractor is responsible to supply drinking water, adequate toilets, washing facilities, fire extinguishers, first aid kits and jobsite posters per OSHA requirements unless specifically stated elsewhere in this Subcontract as a service to be furnished by others.
- 2.1.13 **Construction Equipment.** Subcontractor shall operate and maintain any construction equipment in a safe and compliant manner. All construction equipment is to be in good working condition upon arrival and during

subcontractor's work. Documented preventive maintenance records meeting the manufacturer's minimum recommendations shall be readily available for inspection and submitted to the HOUSTON WATERWORKS TEAM at the end of every week.

2.1.14 **Equipment Inspections.** Each Subcontractor shall conduct daily pre-use inspections of all vehicles and mobile equipment, tools and cord sets, and safety devices. Documented inspections shall be conducted monthly for mobile equipment including cranes, aerial lifts, rigging, ladders, safety equipment including harnesses and lanyards, electrical equipment, cord sets and tools, fire extinguishers, single and two-point suspended scaffolds, etc. Inspection records shall be made available upon request to HOUSTON WATERWORKS TEAM and submitted at the end of every week.

2.1.15 **Cranes.** Subcontractor shall comply with and provide to HOUSTON WATERWORKS TEAM all documentation required by applicable sections of the OSHA Construction Industry Cranes Standard, contained in Subpart CC, 1926.1400 through 1441 prior to mobilizing any cranes onto the project site. Assembly, disassembly and operation of cranes on the project site shall be completely described in Subcontractors Crane Assembly, Disassembly and Operating Safety Procedures that are required to be accepted by HOUSTON WATERWORKS TEAM prior work commencing. Subcontractor critical lift plans shall be submitted to the HOUSTON WATERWORKS TEAM 14 days prior to the lift. Subcontractor shall furnish copies of current annual and monthly crane inspection reports to HOUSTON WATERWORKS TEAM for all cranes brought onto the project site prior to their use. Daily inspection records shall be maintained for all cranes. Load test and certification records shall be supplied to HOUSTON WATERWORKS TEAM upon request.

2.1.16 **Hazardous Materials and Waste.** Subcontractor shall provide HOUSTON WATERWORKS TEAM with an inventory of all hazardous materials and waste to be used, generated or stored on the project site; measures to reduce, reuse or recycle hazardous materials and waste; measures to prevent spills or releases; and procedures for transport and disposal.

2.2 Subcontractor shall designate a qualified safety representative at the Project site with responsibility for preventing accidents and implementing and supervising the Safety Plan and other safety programs. The safety representative shall attend all project safety meetings, participate fully in all activities outlined in the project Health and Safety Plan (HASP) and shall devote whatever time is necessary to perform such duties properly.

Subcontractor's safety representative shall provide HOUSTON WATERWORKS TEAM's health and safety staff with any and all requested information and shall have the authority to immediately correct any safety deficiencies. In addition, whenever Subcontractor's onsite manpower reaches 50 people, including their lower tiered subcontractors and office staff or when HOUSTON WATERWORKS TEAM believes Work justifies full-time health and safety support, a qualified full-time health and safety representative shall be provided onsite during all work activities. This representative must be dedicated to health and safety on this Project with no other onsite or offsite duties.

2.3 Subcontractor shall comply with and secure the compliance of its employees, lower tier subcontractors, suppliers and agents with applicable Laws, its Safety Plan and those of HOUSTON WATERWORKS TEAM or the Owner, if any, and with the reasonable recommendations of insurance companies having an interest in the Project.

Subcontractor agrees to perform a health, safety and environmental pre-qualification of

all lower-tiered subcontractors prior to contract award, including but not limited to, hazardous material and hazardous waste transport and disposal subcontractors. Pre-qualification records shall be maintained by the Subcontractor and shall be readily available for inspection. Lower-tiered subcontractors must show their ability to comply with health, safety, and environmental requirements by completing a written questionnaire outlining their health and safety program components, incident history, Experience Modification Ratings (EMRs), regulatory compliance and training programs for the previous 3 years. Subcontractor shall not accept lower-tiered subcontractors that have fatalities, incident statistics greater than the applicable NAICS industry classification average, workers' compensation experience modification rates greater than 1.0, or inadequate training programs for the anticipated scope of work. Subcontractors who use Lower Tier Subcontractors that do not meet these prequalification criteria shall notify HOUSTON WATERWORKS TEAM for concurrence to use the lower tier subcontractor, prior to working on the project.

- 2.4 Subcontractor's employees and those of its lower tier subcontractors shall have received appropriate training before beginning Subcontractor's Work at the Project site. Subcontractor shall hold regularly scheduled project safety meetings to instruct its personnel and employees of its subcontractors on safety practices. Subcontractor shall furnish appropriate safety equipment for Subcontractor's Work in progress, train appropriate personnel in the use of the equipment and enforce the use of such equipment by its employees and those of its lower tier subcontractors.
- 2.5 Subcontractor shall be solely responsible for the design, construction, installation, use and adequacy of all temporary supports, shoring, bracing, scaffolding, machinery or equipment, fall protection, safety precautions or devices and similar items used by Subcontractor and all lower-tiered subcontractors during performance of Subcontractor's Work.
- 2.6 Temporary structures such as fabrication shops, storage areas, and offices shall not be permitted within existing facility structures unless approved by the HOUSTON WATERWORKS TEAM. Such temporary structures, if permitted inside or adjacent to existing facility structures, must be constructed of fire retardant materials, engineered and structurally able to withstand inclement weather.
- 2.7 Copies of Subcontractor's professional licenses, registration, certifications and permits necessary to perform the Work in the applicable State/County/City shall be provided to HOUSTON WATERWORKS TEAM when returning this Subcontract to HOUSTON WATERWORKS TEAM for execution.
- 2.8 Subcontractor shall implement and maintain a safety program that meets the requirements of 29 CFR 1910.120 / 29 CFR 1926.65 for any designated Hazardous Waste and Emergency Response (HAZWOPER) work. Designated HAZWOPER work includes any work that falls under the scope of OSHA HAZWOPER regulations or any work designated by HOUSTON WATERWORKS TEAM as HAZWOPER work. The SUBCONTRACTOR shall provide documentation of worker HAZWOPER qualification (medical and training) to HOUSTON WATERWORKS TEAM prior to allowing worker access to a designated HAZWOPER site. Additionally, SUBCONTRACTOR shall maintain current HAZWOPER supervisor and worker qualification documentation at the project site.
- 2.9 HOUSTON WATERWORKS TEAM may stop any part of the Work that HOUSTON WATERWORKS TEAM deems unsafe or detrimental to the environment until corrective measures satisfactory to HOUSTON WATERWORKS TEAM have been taken. HOUSTON WATERWORKS TEAM's review of Subcontractor's Health and Safety Plan and/or environmental plans, its observations or failure to stop Subcontractor's unsafe practices shall not relieve Subcontractor of its sole responsibility for safety, limit Subcontractor's obligation to undertake any action

necessary to maintain a safe environment or create any obligation for HOUSTON WATERWORKS TEAM. Subcontractor shall indemnify HOUSTON WATERWORKS TEAM for fines, damages or expenses incurred by HOUSTON WATERWORKS TEAM because of Subcontractor's (including any lower tier subcontractor(s)) failure to comply with HSE requirements.

- 2.10 All safety records submitted to the HOUSTON WATERWORKS TEAM shall be electronic, with the original document stored onsite or in the subcontractor's office.

3.0 Drug Free Workplace

The use, sale, and/or possession of controlled substances and alcohol is prohibited at the project site. Subcontractor has certified to HOUSTON WATERWORKS TEAM that it implements a drug policy that meets HOUSTON WATERWORKS TEAM's minimum standards for a drug-free workplace, that standards are incorporated into the Subcontract by this reference ("Standards"). Prior to project orientation, the subcontractor must present written verification of a negative drug and alcohol screen for each employee (performed within 30 days of coming onsite), prior to the employee being allowed on the project.

HOUSTON WATERWORKS TEAM may conduct reasonable searches, including random searches, of Subcontractor's employees and employees of its lower tier subcontractors and suppliers and may require and receive the results of a 5-panel drug screen and blood alcohol tests for any employee of Subcontractor or its lower tier subcontractors. Any employee of Subcontractor, its lower tier subcontractors or suppliers found to possess or be under the influence of an article prohibited by the Standards, or refusing to consent to a reasonable search by HOUSTON WATERWORKS TEAM may, in HOUSTON WATERWORKS TEAM's sole discretion, be immediately removed from the Project site and denied future access. Subcontractor agrees to enforce its drug policy and to bind its lower tier subcontractors to its policy and to the provisions of this paragraph. Nothing in the paragraph shall require HOUSTON WATERWORKS TEAM to undertake testing or searches.

Badge Requirements:

All Subcontractor employees shall have an issued badge on their person at all times while on-site. Prior to completion of separate HWT Entrance, all employees must receive their badge through the City of Houston. Upon completion of separate entrance, employees shall receive their badge through HWT.

Tool-box meetings:

Subcontractor shall attend at minimum weekly safety tool box meetings, as required and set up by HWT.

4.0 Related Documents

NORTHEAST WATER PURIFICATION PLANT EXPANSION
Health and Safety Plan – January 2018

Subcontract No.: 697592-4010
Subcontract Title: EWP4 – 108in Transmission Mains



END HEALTH, SAFETY AND ENVIRONMENTAL – Exhibit G

Exhibit H – Site Material Control

1.0 General

- 1.1 The Subcontractor shall submit to HOUSTON WATERWORKS TEAM the Warehousing and Material Control Procedures to be utilized for the management of the Materials and Equipment to be procured, received, stored and installed into the facilities during the execution of the Work. These procedures are subject to meeting the minimum requirements this Exhibit H: Site Material Control as well as the review and acceptance by HOUSTON WATERWORKS TEAM. Subcontractor's Warehousing and Material Control Procedure shall at minimum meet the most stringent requirement as determined by HOUSTON WATERWORKS TEAM.
- 1.2 The Subcontractor's procedures shall distinguish between the Material Control methods to be used in the handling of materials and equipment supplied at no cost to Subcontractor by the HOUSTON WATERWORKS TEAM, if any, and the materials and equipment required to be supplied by Subcontractor. Consumable items required for the execution of the work by Subcontractor are required to be handled in the same way as HOUSTON WATERWORKS TEAM supplied materials and remain the sole responsibility of Subcontractor.
- 1.3 HOUSTON WATERWORKS TEAM shall provide adequate storage and staging area, however, protection and security of the materials and equipment turned over to Subcontractor by the Client, HOUSTON WATERWORKS TEAM or provided by Subcontractor shall be Subcontractor's sole responsibility. Care custody and control of materials and equipment passes to Subcontractor at the time the Materials and Equipment is offloaded and received by Subcontractor, and, Subcontractor shall retain care custody and control until Mechanical Completion or Substantial Completion has been accomplished and HOUSTON WATERWORKS TEAM and or Client has accepted completion of the Work.
- 1.4 Management, security, overall protection and preventative maintenance of the materials and equipment turned over to Subcontractor and under its care, custody, and control shall be the responsibility of the Subcontractor until the Work has been accepted by HOUSTON WATERWORKS TEAM.
- 1.5 Subcontractor shall ensure that the project materials and equipment are stored correctly, protected, and where specified preventative maintenance conducted in accordance with manufacturers recommendations, and, are available for installation at the appropriate time.

2.0 Specific Requirements

- 2.1 All Subcontractor's activities with regard to the receipt, receipt inspection, storage, maintenance, on site transportation and installation shall be in compliance with the requirements of this Exhibit H: Site Material Control and Exhibit F: Quality Assurance / Quality Control.
- 2.2 Subcontractor's Warehousing and Material Control Procedures shall be presented to HOUSTON WATERWORKS TEAM within ten working days of the Effective Date of the Subcontract and as a minimum address, the following issues:

- | | |
|-----------|--|
| Section 1 | Requisitioning of Free Issue Materials from HOUSTON WATERWORKS TEAM, where applicable. |
| Section 2 | Procurement of Materials on behalf of HOUSTON WATERWORKS TEAM. |
| Section 3 | Expediting of Materials Purchased on behalf of HOUSTON WATERWORKS TEAM. |
| Section 4 | Shop Inspection of Materials being received for installation into the Work |
| Section 5 | Quality Assurance and Quality Control of all permanent Materials |
| Section 6 | Off Site and On -Site Shipping and Transport of Materials |
| Section 7 | Formal Receipt of Materials and Equipment |
| Section 8 | Receipt Inspection of Materials and Equipment: Over, Short, and Damaged Materials / |

Equipment Reports

- | | |
|------------|---|
| Section 9 | Security of Materials and Equipment |
| Section 10 | Protection of Material and Equipment |
| Section 11 | Storage of Materials and Equipment |
| Section 12 | Planning of Material and Equipment Requirements to support construction |
| Section 13 | Staging of Materials and Equipment to support efficient construction |
| Section 14 | Issuing and control of Materials and Equipment to Construction |
| Section 15 | Release and Distribution of Materials of Equipment |
| Section 16 | Control of Scrap and Surplus Materials and Equipment |
| Section 17 | Final Reconciliation of Materials and Equipment. |
| Section 18 | Disposal of Scrap and Surplus Materials |

END SITE MATERIAL CONTROL – Exhibit H

Exhibit I – Project Work Rules

1.0 Project Work Rules and Site Conditions Overview

- 1.1 The Project Work Rules and Site Conditions Overview compliment the requirements identified in Exhibit A: Scope of Work. The requirements and provisions of Exhibit A: Scope of Work take precedence over Exhibit I: Project Work Rules and Site Conditions. Subcontractor and HOUSTON WATERWORKS TEAM agree the safe efficient operation of a construction worksite requires the spirit of teamwork, cooperation, respect and good communication from all participants engaged in the Project. Subcontractor and HOUSTON WATERWORKS TEAM agree to work such a manner. Temporary Facilities shall be provided in accordance with Exhibit A: Scope of Work Article 7.0 Temporary Facilities. HOUSTON WATERWORKS TEAM shall supply the Temporary Facilities defined therein in accordance with the provisions this Exhibit I: Project Work Rules and Site Conditions.
- 1.2 Project participants, be they employees of the Client, HOUSTON WATERWORKS TEAM, Subcontractors, Suppliers, or Guests, who refuse or fail to follow standards set forth herein shall be subjected to disciplinary action up to and including immediate removal from the project site and access privileges to the project site revoked
- 1.3 In cases not specifically mentioned, Project Participants are expected to use good judgment and refer any questions to their immediate supervisors. Subcontractors shall refer any questions to HOUSTON WATERWORKS TEAM Subcontract Administration.

2.0 Project Name and Location

- 2.1 The official project name for this project is Northeast Water Purification Plant Expansion.
- 2.2 The Project is located at 12630 Waterworks Blvd, Humble, TX 77369.
- 2.3 The mailing address for HOUSTON WATERWORKS TEAM at the project site is: 12630 Water Works Blvd, Humble, TX 77369
- 2.4 The Shipping address for the Project Site is: 12630 Water Works Blvd, Humble, TX 77369.

3.0 Project Work Rules

Hours of Operation

- 3.1 The standard hours of operation for the project site are Monday through Friday, 7:00 a.m. to 5:30 p.m. These hours of operation are based on a single shift operation. Adjustments to the hours of operation may be made to accommodate daylight conditions.
- 3.2 Security gates for the project site shall normally open one-hour prior to the start of the shift and shall close one-hour after the shift ends. Security gates shall be staffed 24 hours per day, seven days per week. Access to the project site during off shift work hours by Subcontractor employees or Lower-tier Subcontractors requires the approval of the HOUSTON WATERWORKS TEAM.
- 3.3 Lunch breaks (30 minutes) are typically taken between the hour of 12:00 pm and 12:30 pm. Lunch break times may be amended to facilitate efficient use of facilities at HOUSTON WATERWORKS TEAM's sole discretion.

- 3.4 Work scheduled for more than 10 hours a day or 50 hours a week shall have prior approval from the HOUSTON WATERWORKS TEAM and/or Client. Subcontractor shall provide HOUSTON WATERWORKS TEAM 48 hours advanced notification of their desire to work outside of the normal project hours of operation. Exceptions to this 48-hour notification requirement shall be made for special situations where work approach causes the hours of operation to run later or start earlier; examples might include concrete placing/finishing or QA/QC X-Ray of materials.
- 3.5 Shift work, outside the standard first shift operation, must be approved in advance by HOUSTON WATERWORKS TEAM and/or Client. Subcontractor shall provide a minimum of two-weeks of advance notice for sustained alternate shift work operations.
- 3.6 In the event that a Subcontractor is forced to work extended work hours or alternate shift operation schedules due to the performance of this Subcontractor, Subcontractor agrees to reimburse HOUSTON WATERWORKS TEAM for the costs incurred by HOUSTON WATERWORKS TEAM in supporting a Subcontractors alternate work schedule. Typical costs to be borne by the Subcontractor include the salaries and associated costs for:
 - 3.6.1 HOUSTON WATERWORKS TEAM's Supervision Personnel that must be on site when work is ongoing.
 - 3.6.2 HOUSTON WATERWORKS TEAM's Safety Manager /EMT/First Responder person
 - 3.6.3 HOUSTON WATERWORKS TEAM's Quality Manager and inspection staff
 - 3.6.4 Third party Testing Laboratory supervision and staff.

Subcontractor agrees to a fixed rate for these costs of \$500.00 Per Hour. Subcontractor agrees that this rate shall be charged for every hour Subcontractor has a presence on the project site during these events. Billable hours shall be rounded up to the next full hour for billing purposes. Billing for these events shall be handled as a deductive Change Order to this Subcontract Agreement.

If subcontractor is required to work extended work hours or alternate shift operation schedules due to factors outside of their control, HOUSTON WATERWORKS TEAM waives the requirement for reimbursement of the above stated HOUSTON WATERWORKS TEAM costs. Waiver of these costs shall be typically allowed for items like weather related delays.
- 3.7 Subcontractor employees, including Lower-tier Subcontractor's employees, are expected to be at their work areas by the scheduled starting time of the shift.
- 3.8 Subcontractors are to provide competent, supervision onsite anytime Subcontractor or lower-tier Subcontractor's employees are working on the project site.
- 3.9 Delivery of subcontract materials and equipment can be made between the hours of 7:30 am and 4:00 pm on normal working days. Deliveries attempted outside of these hours shall be refused and held. This shall allow the project site security forces to efficiently manage the process of transitioning workers onto and off of the project site. Subcontractor may request permission for deliveries outside of these hours with twenty-four (24) hours advanced notice.
- 3.10 Project Labor Posture
 - 3.10.1 Describe the Labor Posture of the project, i.e. Union, Davis Bacon Prevailing Wage, Merit Shop, Open Shop.

- 3.10.2 If Project Level Union Agreements exist for the project site, describe them in this section. Seek input from the Labor Relations Manager for your Company in writing this section>. *Example: The National Construction Agreement (NCA) as modified and amended has been approved for use on this project. Accordingly, each Subcontractor and all its Lower-tier Subcontractors, engaged in on-site construction work, are required to become signatory to, and shall comply with, the NCA as modified and amended. Prior to mobilizing onto the project site, each Subcontractor and their lower-tier Subcontractors shall execute a "Letter of Assent" (provided by the HOUSTON WATERWORKS TEAM) that binds them to the NCA.*
- 3.10 Project Labor Posture
 - 3.10.1 Describe the Labor Posture of the project, i.e. Union, Davis Bacon Prevailing Wage, Merit Shop, Open Shop.
 - 3.10.2 If Project Level Union Agreements exist for the project site, describe them in this section. Seek input from the Labor Relations Manager for your Company in writing this section>. *Example: The National Construction Agreement (NCA) as modified and amended has been approved for use on this project. Accordingly, each Subcontractor and all its Lower-tier Subcontractors, engaged in on-site construction work, are required to become signatory to, and shall comply with, the NCA as modified and amended. Prior to mobilizing onto the project site, each Subcontractor and their lower-tier Subcontractors shall execute a "Letter of Assent" (provided by the HOUSTON WATERWORKS TEAM) that binds them to the NCA.*

4.0 Project Site Security, Access and Control

- 4.1 Access to the project work site shall be controlled via a system of security fences, gates, security guards, badge entry systems and procedures
- 4.2 Unarmed security services shall be provided by HOUSTON WATERWORKS TEAM on the project site 24 hours per day, seven days per week, and 365 days per year. Security services are being provided to control access and egress to the project site and to assist the Project team in the event of an emergency. Security services shall randomly patrol the project site after normal hours of operation.
- 4.3 HOUSTON WATERWORKS TEAM and Client are not responsible for Subcontractors and their lower-tier Subcontractors materials, tools or equipment. Subcontractor shall provide its own security measures to protect their facilities, materials, equipment and tools as they deem necessary.
- 4.4 The project site shall be fenced with adequate gates provided for personnel and vehicular traffic by the HOUSTON WATERWORKS TEAM. Access through these gates shall be monitored and controlled. Subcontractor employees and visitors shall enter the project site at the appropriate security gates identified by HOUSTON WATERWORKS TEAM.
- 4.5 Security officers and HOUSTON WATERWORKS TEAM's Site Management team have the full authority to inspect vehicles, lunchboxes, coolers, cartons, briefcases and other similar items prior to an employee, guest /visitor or delivery entering or leaving the project site. Such inspections may be conducted daily when employees, materials or equipment are attempting to enter or leave the project site. No prior notice shall be given to any such inspections. Failure to allow such inspections shall be grounds for immediate discharge and removal from the project site.
- 4.6 Subcontractor employees shall be identified by a project site security badge that shall be worn at all times on their outer garments while on the project site.

- 4.7 Employees, both staff and craft, shall be issued ID cards to be presented for access onto the project site. The ID card is required to be swiped at a card reader or presented to the security guard upon entry and exit of the project site.
- 4.8 Each Subcontractor employee who comes onto the project site must complete the HOUSTON WATERWORKS TEAM's new hire safety orientation program described in Exhibit G: Health, Safety and Environmental. Cards shall be issued after an employee successfully passing the Project site Safety Training programs.
- 4.9 ID cards shall be issued and controlled by HOUSTON WATERWORKS TEAM. There is no cost to Subcontractor for the first issuance of the security badge to its employees. If a Subcontractor employee loses their security access badge, a replacement badge shall be issued at a cost of \$10.00 per badge. HOUSTON WATERWORKS TEAM shall use this security access card system to monitor attendance and for maintaining safe project site access control.
- 4.10 Subcontractor shall not admit anyone onto the project site, except as necessary to perform Work associated with their Subcontract, without, in each instance, first obtaining approval of HOUSTON WATERWORKS TEAM.
- 4.11 Subcontractor shall be notified at any time a visitor to the project site requests to see the Subcontractor. Subcontractor shall be required to escort all visitors from the Security gate to their place of work or office.
- 4.12 All visitors shall be given appropriate training/orientation before being permitted onto the actual construction work site and all visitors shall be escorted within the project site by a properly trained Subcontractor supervisor.
- 4.13 HOUSTON WATERWORKS TEAM requires 24 hours' notice of all potential Subcontractor visitors. NOTE: Delivery personnel are not covered by this notice provision.
- 4.14 Visitors/guests shall only be permitted access via appointment and shall be admitted with a visitor's pass at the time of visitor's arrival. Visitor passes must be returned to security when visitor/guest leaves the project site.
- 4.15 Subcontractor shall be responsible for providing its visitors and guests appropriate and approved Personal Protection Equipment (PPE) as defined in Exhibit G: Health, Safety and Environmental. No visitor shall be allowed onto the project site, without appropriate Personal Protection Equipment.
- 4.16 Vehicular access onto the project site is restricted.
- 4.17 **Personal vehicles shall be allowed to access the project site at HWT designated locations.**
- 4.18 All Subcontractor vehicles attempting to enter the project site must enter through a designated security gate identified by HOUSTON WATERWORKS TEAM.
- 4.19 HOUSTON WATERWORKS TEAM shall issue vehicle-parking passes to all Subcontractor employees. These passes shall remain in employees' vehicles and shall be visible at all times. Parking areas shall be designated as follows: Craft Parking, Staff Parking, and Visitor Parking.
- 4.20 Site Vehicle Passes (work vehicles) shall be issued by HOUSTON WATERWORKS TEAM. These passes shall allow only company vehicles onto the project site. Proof of insurance and ownership must be on record with HOUSTON WATERWORKS TEAM prior to a Project site Vehicle Pass being issued. The number of project site vehicle passes shall be limited for each Subcontractor. These passes cover all Subcontractors and Lower-tier Subcontractor vehicles. Permitted Subcontractor and Lower-tier subcontractor vehicles must display the company name/logo on the exterior.
- 4.21 All vehicles entering and/or leaving the project site are subject to search. Searches shall be conducted randomly and at the discretion of the Contactor. Refusal to abide by the requirements of the search shall

result in the Subcontractor losing the Project site Vehicle Pass as well as removal of the vehicle operator from the project site.

- 4.22 All vehicles on the project site must abide by all posted signage around the project site, such as speed and stop signage
- 4.23 All personnel in a vehicle must wear vehicle restraint/seat belts while vehicle is in motion around the project site.
- 4.24 All employees operating vehicles on the project site must have a valid driver's license.
- 4.25 No Subcontractor or Lower-tier Subcontractor employees shall be allowed to ride on or in beds of truck or vehicles.

5.0 Project Photography

- 5.1 Subcontractor shall abide by the policy of the HOUSTON WATERWORKS TEAM and Client that prohibits both the possession of and the taking of photographs on the project site without written permission of the HOUSTON WATERWORKS TEAM and/or Client. HOUSTON WATERWORKS TEAM shall issue a Photography Pass that must be on the person of anyone taking photographs on the project site. Subcontract employees or Lower Tier Subcontractors found taking photographs without an authorized and valid Photography Pass shall be immediately removed from project site and all photographs shall be seized and destroyed by HOUSTON WATERWORKS TEAM and or Client.
- 5.2 Subcontractor shall request in writing to HOUSTON WATERWORKS TEAM for permission to take progress photographs of its Work. Subcontractor shall not take photographs on the Project Site of anything other than its Work. HOUSTON WATERWORKS TEAM requires all photographs to be copied to them and have the right to seize the original and copies thereof of those they deem inappropriate or in violation of the written Photography Pass.

6.0 Release of Project Information

Subcontractor or its lower-tier Subcontractors and or Suppliers shall not publish, advertise, or otherwise divulge information with respect to this Project, Client, HOUSTON WATERWORKS TEAM or this Subcontract without prior written consent of HOUSTON WATERWORKS TEAM and/or Client.

7.0 Use of Cell Phones, Radios, I-PODS® and Two-Way Communications Devices

- 7.1 The use of a wireless device* by Subcontractor is prohibited while operating a HOUSTON WATERWORKS TEAM-owned, leased, or rented Motor Vehicle**, or while operating any other Motor Vehicle** on the project site.
* *Wireless Device* means any electronic and/or mobile device, including mobile phones, personal digital assistants (PDAs), smartphones, voice recorders, GPS, notebooks, tablets (or other similar devices), laptops, and hands-free or voice-recognition (Bluetooth) devices.
** *Motor Vehicle* means all motorized vehicles (including motorcycles) that are operated on public roads or private property.
- 7.2 The use of personal cell phones on the project site permitted, except while operating a piece of equipment or motor vehicle. Subject to HOUSTON WATERWORKS TEAM's approval, designated Subcontractor supervisor(s) shall be permitted to have and use cell phones for project business purposes.
- 7.3 The use of AM-FM radios, iPods® or any similar devices used to play music are strictly prohibited on the project site.

- 7.4 Subcontractor shall be allowed to utilize two-way communication devices on the project site to communicate effectively and efficiently with its personnel. Subcontractor shall provide a copy of any FCC licenses for said two-way communication devices to HOUSTON WATERWORKS TEAM for our records.
- 7.5 Subcontractor may provide and train HOUSTON WATERWORKS TEAM's Security Personnel with a two-way communication device such that Security may contact them when Subcontractor has a visitor, delivery or for any other business reason. Subcontractor provides the Project Security team the two-way communication device at their own risk. HOUSTON WATERWORKS TEAM assumes no responsibility or liability for its use or loss.

8.0 Client Facilities

- 8.1 Subcontractor and its lower-tier subcontractors shall confine its employees, lower-tier subcontractors, material suppliers, and visitors/guests to those portions of project site necessary to accomplish the Work associated with Agreement and shall prohibit such personnel from entering Client facilities except as specifically authorized by HOUSTON WATERWORKS TEAM and Owner.
- 8.2 Subcontractor and its lower-tier subcontractors shall not utilize any facilities, tools, equipment, or any other Client materials without the prior approval of the Client and HOUSTON WATERWORKS TEAM, unless specifically stated in this Subcontract Agreement.

9.0 Use of Alcohol, Tobacco and Firearms

- 9.1 The use of tobacco products on the project site is limited to designated areas around the project site. HOUSTON WATERWORKS TEAM reserves the right to change this policy at its sole discretion.
- 9.2 The consumption, use, sale or distribution of alcohol or controlled/illegal substances is not allowed on the project site. This includes any off-site facilities, parking areas, storage areas or offices.
- 9.3 Being under the influence of alcohol or controlled/illegal substances is prohibited on the project site
- 9.4 Possession and usage of a firearm, explosives, or other weapons on the project site is prohibited. This includes any off-site facilities, parking areas, storage areas or offices.

10.0 Disciplinary Actions

- 10.1 HOUSTON WATERWORKS TEAM reserves the right to remove and bar Subcontractor employee immediately from the project site if, in HOUSTON WATERWORKS TEAM's sole discretion, the circumstances associated with an incident do not warrant the use of progressive discipline. HOUSTON WATERWORKS TEAM
- 10.2 Subcontractor employees, visitors/guests found participating in any of the following activities shall be subject to immediate removal from the project site:
 - 10.2.1 Violation of Project Safety Rules that endanger personnel or property.
 - 10.2.2 Refusal to participate in the Drug Testing/Screening Program.
 - 10.2.3 The consumption, use, sale or distribution of alcoholic beverages.
 - 10.2.4 Possession or use of a controlled/illegal substance or attempt to bring same onto the project site.
 - 10.2.5 Being under the influence of alcohol or controlled/illegal substance.
 - 10.2.6 Acts of sabotage

- 10.2.7 Violation of lockout/tag out program.
- 10.2.8 Possession of firearms, explosives, or other weapons on the project site.
- 10.2.9 Threatening or intimidating a supervisor or another worker on the project site.
- 10.2.10 Defacing or willful destruction of Client, HOUSTON WATERWORKS TEAM, Subcontractor, or another employee's property.
- 10.2.11 Acts of theft, attempted theft, or fraud against Client, HOUSTON WATERWORKS TEAM, Subcontractor(s) or another employee's property.
- 10.2.12 Fighting or attempting a willful act to cause bodily injury or property damage.
- 10.2.13 Failure to allow inspection of vehicles, lunchboxes, cooler, cartons, briefcases, and other such items prior to their entering or leaving the Project site.
- 10.2.14 Immoral conduct or conduct that violates the common decency of fellow employees, Subcontractors, HOUSTON WATERWORKS TEAM, Client, or the community.
- 10.3 Violation of any rules listed in this document, other than those listed as activities subject to immediate discharge, and the General Safety Rules or other safety rules applicable to the Project, shall result in the following *Progressive Disciplinary Action*:
 - 10.3.1 Warning: Documented verbal warning at time of orientation.
 - 10.3.2 First Offense: Written warning
 - 10.3.3 Second Offense: Discharge/removal from project site
- 10.4 Subcontractor employees and visitors/guest found participating in any of the following activities shall be subject to the *Progressive Discipline Action* identified in 10.3 above:
 - 10.4.1 Eating outside of designated eating areas
 - 10.4.2 Being in areas restricted to authorized personnel without permission.
 - 10.4.3 Gambling of any form such as, but not limited to lotteries or pools
 - 10.4.4 Use of threatening, profane, or abusive language.
 - 10.4.5 Horseplay, pranks, malicious mischief, or any other conduct affecting the rights/safety of others.
 - 10.4.6 Neglect or carelessness in handling or use of Subcontractor, HOUSTON WATERWORKS TEAM, or Client property.
 - 10.4.7 Violation of posted signs.
 - 10.4.8 Failure to stop vehicles at Project site intersections
 - 10.4.9 Failure to wear vehicle restraint/seat belts while on the project site.
 - 10.4.10 Loitering or being present on in excess of 30 minutes before or after assigned shifts without permission.
 - 10.4.11 Disturbing or posting of literature, photographs, or other printed matter.
 - 10.4.12 Soliciting or attempting to solicit or collect funds without prior written permission.
 - 10.4.13 Use of another Subcontractor's, HOUSTON WATERWORKS TEAM's, or Client's tools, material or equipment without prior permission.
 - 10.4.14 Sale of food or beverages onsite by any source, employee or vendor.
 - 10.4.15 Smoking in non-designated smoking areas.
 - 10.4.16 Failure to comply with security procedures (e.g. card swipe, etc) established by HOUSTON WATERWORKS TEAM for entering or leaving Project site.

11.0 Temporary Facilities

- 11.1 Temporary Facilities shall be provided in accordance with Exhibit A: Scope of Work Article 7.0 Temporary Facilities. HOUSTON WATERWORKS TEAM shall supply the Temporary Facilities defined therein in accordance with the provisions this Exhibit I, Project Rules and Site Conditions.
- 11.2 HOUSTON WATERWORKS TEAM shall supply an area, rough graded to enable Subcontractor to temporarily install its office trailer(s), and support facilities. The offices of lower-tier Subcontractors of Subcontractor must also be installed within the area.
- 11.3 Subcontractor and their Lower-tier Subcontractors are responsible for the installation and removal of all office trailers. The trailers shall be installed in total accordance with all applicable Federal, State, and Local building codes, ordinances and regulations.
- 11.4 Subcontractor and their Lower-tier Subcontractors are responsible for the installation and removal of all temporary utilities; power, telephone, data communications, plumbing etc. to their office trailer(s) in accordance with hook up points described in the Subcontract documents.
- 11.5 Subcontractor and their Lower-tier Subcontractors office trailer(s) shall have a sign placed on the outside clearly identifying the Subcontractors name
- 11.6 Subcontractor and their Lower-tier Subcontractors office trailer(s) shall have a weatherproof placard placed adjacent to each door identifying Subcontractors emergency contact information including Subcontractors project representatives' emergency contact names, their local phone numbers and Subcontractors home office phone number and emergency contact in the home office. This information shall also be provided to HOUSTON WATERWORKS TEAM in writing upon Subcontractor mobilizing to the Project Site. This information shall be kept current while the Subcontractor is on the Project Site.
- 11.7 All office trailers shall be equipped with appropriate fire /smoke detection equipment, as well as fire extinguishers.
- 11.8 Subcontractor and their Lower-tier Subcontractors shall keep the inside and outside of the office trailer clean, free of debris and trash and in adequate repair, such that a professional image is always presented.
- 11.9 Break/Change Room Facilities
 - 11.9.1 Subcontractor shall provide or cause to be provided adequate facilities for construction craft workers to take a break and change clothing. Break times of Subcontractors workers may be staggered to alleviate overcrowding.
 - 11.9.2 Subcontractor is responsible for the installation and removal of all break/change trailers. The trailers shall be installed per all applicable Federal, State, and Local building codes, ordinances and regulations.
 - 11.9.3 Subcontractor is responsible for providing adequate access and egress to all break/change trailers per all applicable Federal, State, and Local building codes, ordinances and regulations.
 - 11.9.4 Subcontractor is responsible for all installation and removal of all temporary utilities; power, plumbing, etc. to the break/change trailers (s).
 - 11.9.5 Subcontractor and their Lower-tier Subcontractors shall keep the inside and outside of the facilities provided clean, free of debris and trash while their employees are using the facilities.

11.10 Temporary Construction Facilities

- 11.10.1 Subcontractor shall supply adequate facilities for temporary construction aids (storage, warehousing, tool cribs, and fabrication shops) as required to perform the Work associated with this Subcontract.
- 11.10.2 Subcontractor is responsible for the installation, maintenance, and removal of all temporary construction facilities. Temporary construction facilities shall be constructed and maintained per all applicable Federal, State, and Local building codes and ordinances

12.0 Temporary Utilities

- 12.1 Temporary Utilities shall be provided in accordance with Exhibit A: Scope of Work Article 7.0 Temporary Facilities. HOUSTON WATERWORKS TEAM shall supply the Temporary Utilities defined therein in accordance with the provisions this Exhibit I: Project Rules and Site Conditions.
- 12.2 Temporary Electrical Power
 - 12.2.1 Temporary HOUSTON WATERWORKS TEAM shall supply temporary electrical power onto the project site in the form of 480V and 120V A/C supply at areas identified on the Site Utilization Plan. Subcontractors and Lower-tier Subcontractors may use this power in the performance of their work.
 - 12.2.2 Temporary wiring from these power distribution points to trailers and work areas of the Subcontractor shall be installed, maintained and removed at the expense of the Subcontractor. All temporary wiring installed by any Subcontractor shall be installed per all applicable Federal, State, and Local building codes, ordinances and regulations.
 - 12.2.3 Electricity consumption costs, i.e. power bills, for power delivered via the HOUSTON WATERWORKS TEAM provided supply points, shall be paid by HOUSTON WATERWORKS TEAM / Subcontractor.
 - 12.2.4 If electrical power is needed in remote areas of the project site or in any off site facilities of the Subcontractor, and these areas are not accessible by HOUSTON WATERWORKS TEAM provided Electrical distribution points, Subcontractor shall provide its own form of temporary power source. All costs associated with this additional power source are to be paid by Subcontractor.
 - 12.2.5 Subcontractor shall be responsible for providing task lighting in their Work areas adequate for the Work being performed. General lighting shall be provided in the following areas by HOUSTON WATERWORKS TEAM at no costs to Subcontractor:
 - 12.2.5.1 General Construction Site Lighting
 - 12.2.6 HOUSTON WATERWORKS TEAM shall not be held responsible for the consequences of interruptions to the continuity of the services provided.
- 12.3 Temporary Potable/Non-Potable Water
 - 12.3.1 HOUSTON WATERWORKS TEAM shall supply temporary potable and non-potable water onto the project site at areas identified on the Site Utilization Plan. Subcontractors and Lower-tier Subcontractors may use these water sources in the performance of their work at no costs to Subcontractor.
 - 12.3.2 Water consumption costs, i.e. water bills, for water delivered via the HOUSTON WATERWORKS TEAM provided supply points, shall be paid by HOUSTON WATERWORKS TEAM.
 - 12.3.3 Subcontractor may connect to these water sources if required for use in their trailers and in the performance of their work. All costs associated with the installation, maintenance, and removal of temporary water connections shall be paid for by Subcontractor. All temporary water piping installed by any Subcontractor shall be

- installed per all applicable Federal, State, and Local building codes, ordinances and regulations.
- 12.3.4 HOUSTON WATERWORKS TEAM shall not be held responsible for the consequences of interruptions to the continuity of the services provided.
- 12.4 Temporary Sewage Connections.
- 12.4.1 HOUSTON WATERWORKS TEAM shall supply temporary sewage connections on the project site at areas identified on the Site Utilization Plan. Subcontractors and Lower-tier Subcontractors may use these sewage connection points in the performance of their work at no costs to Subcontractor.
- 12.4.2 Sewage fees and associated sewage disposal costs for all sewage disposed of through HOUSTON WATERWORKS TEAM provided sewage connection points shall be paid by HOUSTON WATERWORKS TEAM.
- 12.4.3 Subcontractor may connect to these sewage connection points, if required for use in their trailers and in the performance of their work. All costs associated with the installation, maintenance, and removal of temporary sewage piping shall be paid for by Subcontractor. All temporary sewage piping installed by any Subcontractor shall be installed per all applicable Federal, State, and Local building codes, ordinances and regulations.
- 12.4.4 HOUSTON WATERWORKS TEAM shall not be held responsible for the consequences of interruptions to the continuity of the services provided.
- 12.5 Temporary Sanitary Facilities
- 12.5.1 HOUSTON WATERWORKS TEAM shall supply and maintain temporary sanitary facilities around the project site. Subcontractor may request temporary sanitary facilities specifically in their work area. If HOUSTON WATERWORKS TEAM agrees, HOUSTON WATERWORKS TEAM shall have appropriate facilities installed and maintained; otherwise, Subcontractor employees shall be required to use HOUSTON WATERWORKS TEAM provided facilities in the general locations.
- 12.5.2 All costs for supplying, maintaining and removing these temporary sanitary facilities from the project site shall be by HOUSTON WATERWORKS TEAM.
- 12.6 Temporary Voice/Data Telephone Connections
- 12.6.1 HOUSTON WATERWORKS TEAM shall supply temporary voice and data connection points on the project site at areas identified on the Site Utilization Plan.
- 12.6.2 Telephone usage costs for all voice and data communications shall be paid by Subcontractor
- 12.6.3 All telephone and data equipment required by Subcontractor in the delivery of their work shall be supplied by Subcontractor.
- 12.6.4 Subcontractor may connect to these temporary voice and data connection points, if required for use in their trailers and in the performance of their work. All costs associated with the installation, maintenance, and removal of temporary wiring shall be paid for by Subcontractor. All temporary wiring installed by any Subcontractor shall be installed per all applicable Federal, State, and Local building codes, ordinances and regulations
- 12.6.5 HOUSTON WATERWORKS TEAM shall not be held responsible for the consequences of interruptions to the continuity of the services provided.
- 12.6.6 Subcontractor shall be responsible for any and all costs and coordination for the installation, maintenance usage and removal of data communications dedicated devices or wiring; be they fiber optics, cable modems and wiring, T-1 level communications methodologies, or any similar type data communications devices or wiring needed by Subcontractor in the performance and delivery of their work.
- 12.7 Construction Waste Clean-Up
- 12.7.1 Subcontractor is responsible for maintaining their work areas free from debris and clutter. Subcontractor shall on a daily basis police all of their work areas and shall remove all

- debris and waste from their work areas and ensure the work area is available for safe and efficient work to progress.
- 12.7.2 HOUSTON WATERWORKS TEAM shall supply temporary construction and office waste dumpsters on the project site at areas identified on the Site Utilization Plan.
- 12.7.3 Construction waste disposal hauling and disposal fees shall be paid by HOUSTON WATERWORKS TEAM.
- 12.7.4 HOUSTON WATERWORKS TEAM shall place around the project site, 55-gallon steel drums for project site workers to place small debris in while working. Subcontractor shall, on a daily basis, assist HOUSTON WATERWORKS TEAM in collecting the drums and emptying them from their work areas, into the temporary construction and office waste dumpsters.
- 12.7.5 Subcontractor shall only place in dumpsters and trash barrels, debris that is appropriate for disposal at local construction landfills. Disposal of contaminated and unapproved debris into the HOUSTON WATERWORKS TEAM provided dumpsters is not allowed. Disposal of contaminated waste generated on the project site by Subcontractor shall be performed by Subcontractor and all costs associated with the same shall be paid by Subcontractor.
- 12.7.6 Subcontractor shall be responsible for placing all of its construction and office waste and debris inside of the dumpster, with no materials going over the top of the dumpster ledge or hanging out of the dumpster.
- 12.7.7 Subcontractor is responsible for keeping the area around the dumpsters clear and free of trash and debris.
- 12.7.8 Subcontractor is responsible for the final cleaning of its work areas, lay down facilities, office areas, and temporary construction facilities. Cleanliness of Subcontractors work shall be an element of the development and close out of the Subcontractors punch list program.
- 12.8 Construction Temporary Roads
- 12.8.1 HOUSTON WATERWORKS TEAM / Subcontractor shall install and maintain temporary construction roads at areas identified on the Site Utilization Plan. HOUSTON WATERWORKS TEAM's supplied roads shall be designed for normal construction traffic such as deliveries by eighteen (18) wheeled semi-trucks or concrete ready mix vehicles
- 12.8.2 Subcontractor employees, visitors and delivery vehicles shall abide by all posted project site traffic and directional signage.
- 12.8.3 Unless posted otherwise, the speed limit for all traffic traveling on the project site is ten (10) mph.
- 12.8.4 If Subcontractor, in the performance of their work, damages the road surface and/or structural integrity of any road, Subcontractor shall repair or cause to be repaired such damaged areas back to the structural condition of adjacent areas not disturbed by Subcontractor.
- 12.8.5 If Subcontractor needs additional temporary roads or access ways constructed for their use in delivering their scope of supply, Subcontractor shall provide required roads at their own expense. This includes additional road areas for access, equipment set up and staging or for heavy hauling of large machinery components.
- 12.9 Construction Temporary Parking
- 12.9.1 HOUSTON WATERWORKS TEAM / Subcontractor shall supply and maintain a temporary construction parking facilities at areas identified on the Site Utilization Plan.
- 12.9.2 All subcontractor employees shall be required to park in the temporary construction parking facilities, unless employee is granted permission to park on project site.
- 12.9.3 Subcontractor shall be responsible for assisting HOUSTON WATERWORKS TEAM in keeping the parking lot clean of trash and debris.
- 12.9.4 Subcontractor employees shall not be allowed to leave vehicles in the Construction temporary parking lot overnight, unless prior arrangements have been made with site security.

- 12.10 Construction Temporary Laydown and Storage
 - 12.10.1 HOUSTON WATERWORKS TEAM shall supply and maintain a temporary lay down and storage lots at areas identified on the Site Utilization Plan.
 - 12.10.2 Subcontractor shall be allocated a space in the temporary lay down and storage lots for their materials and equipment to be stored in.
 - 12.10.3 Subcontractor shall protect and secure all materials and equipment from weather damage and loss, as required.
 - 12.10.4 Subcontractor shall be responsible for assisting HOUSTON WATERWORKS TEAM in keeping their temporary lay down and storage lots clean of trash and debris.
- 12.11 Construction Fire Protection
 - 12.11.1 Subcontractor shall provide adequate fire protection devices in their work areas to protect both property and life.
 - 12.11.2 Fire protection devices shall be inspected on a periodic basis and evidence of inspections shall be presented to HOUSTON WATERWORKS TEAM on a quarterly basis, unless required more frequently by Federal, State, or Local building codes, ordinances and regulations.
 - 12.11.3 All Subcontractor employees shall be trained in the proper use of Subcontractor supplied fire protection devices. Evidence of Subcontractor employee training shall be provided to HOUSTON WATERWORKS TEAM on an annual basis.
 - 12.11.4 Subcontractor shall provide fire watches as required to complete the work. Fire watches must be properly trained on the roles and responsibilities of a fire watch.
- 12.12 Construction Equipment and Tools
 - 12.12.1 Subcontractor shall provide all construction equipment and tools necessary to perform the scope of supply and services as defined in this Subcontract.
 - 12.12.2 Subcontractor is responsible for the care, custody and control of all construction equipment and tools brought onto the project site.
 - 12.12.3 All construction equipment and tools utilized on this project site must be in good working condition and fit for use and duty and must meet all requirements of Federal, State, or Local ordinances and regulations.
 - 12.12.4 During performance of the work, Subcontractor shall implement the following measures to minimize construction equipment and tool noise, dust generation, and construction vehicle traffic impacts:
 - 12.12.4.1 Exhaust silencers shall be installed and maintained on all heavy construction equipment.
 - 12.12.4.2 Unnecessary idling of equipment is prohibited.
 - 12.12.4.3 Only noise attenuated air compressor equipment may be used on the project site.
 - 12.12.4.4 Pneumatic tools used to deliver the work shall be installed with exhaust mufflers.
 - 12.12.4.5 Vehicles transporting loose or fine aggregate materials shall be covered and or watered down to minimize dust generation, as required.
 - 12.12.4.6 Open storage areas containing fine or unbound materials shall be covered or watered down to minimize dust generation, as required
 - 12.12.4.7 All rolling equipment utilized on project site shall have audible back-up alarms / devices installed and maintained.
 - 12.12.4.8 Tracking or other means of transporting dirt, dust or debris onto roads not on the project site is to be minimized and Subcontractor shall be responsible for the prompt cleanup of any areas, roads or sidewalks contaminated by this Subcontractor with dirt, dust, or debris.
 - 12.12.5 All equipment brought onto the project site shall be inspected and tested by the Subcontractor to ensure it is fit for its intended purposes PRIOR to being put into service. Initial and periodic inspections and certifications of construction equipment brought onto the project site by this Subcontractor that are required by Federal, State, or Local

- ordinances and regulations are the responsibility of this Subcontractor. Copies of all inspection reports shall be provided to HOUSTON WATERWORKS TEAM, immediately upon being performed.
- 12.12.6 Engineered lift plans shall be prepared and submitted for HOUSTON WATERWORKS TEAM's review for any lift/hoist Subcontractor or its Lower Tier Subcontractors propose to make, if:
- 12.12.6.1 Multiple pieces of equipment shall be used to make a single lift, i.e. multi-crane pick.
- 12.12.6.2 The component being lifted puts the lift configuration, (crane capacity, lifting radius, and weight being lifted) into eighty percent (80%) of the equipment lifting chart for said piece of equipment.
- 12.12.6.3 The item(s) to be lifted are above twenty (20) tons in weight.
- 12.12.7 Wire ropes, nylon slings, chains, or other lifting devices, i.e. shackles, hooks, etc., shall be inspected by the Subcontractor on a periodic basis and prior to any lift. Copy of periodic inspection reports and test certifications shall be provided to HOUSTON WATERWORKS TEAM immediately upon completion of the tests. Wire ropes, slings or devices found to not meet the requirements of the manufacturer for safe usage, shall be immediately taken out of service and either destroyed or removed from the project site.
- 12.12.8 Safety protective devices on construction equipment and tools shall NOT be removed, overridden or disengaged at any time while equipment or tools are in use on the project site. If a safety protection device is removed or disengaged the piece of equipment shall be immediately tagged as inoperable until the equipment or tool safety device is repaired or re-engaged for use.
- 12.12.9 Operators of construction equipment and tools on the project site must be properly trained in the use of the equipment they are operating. If Federal, State, or Local ordinances and regulations require certification or testing of construction equipment or tool operators, Subcontractor shall ensure that said operator testing and/or certifications are obtained. HOUSTON WATERWORKS TEAM reserves the right to requests copies of any certification or training documentation for Subcontractors equipment or tool operator's employees.
- 12.12.10 Subcontractor's operators on any piece of construction equipment, tool or vehicle must be in control of said equipment, tool or vehicle when in operation, moving, under load or when idling. Construction operators may not leave the seat of a piece of equipment when in operation, under load or when idling.

END PROJECT WORK RULES AND SITE REQUIREMENTS – Exhibit I

END OF SUBCONTRACT DOCUMENTS